

# PHILIPS

# 17A A 3342

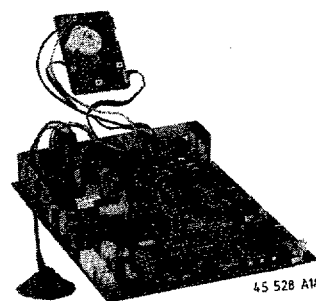
MODEL

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## SERVICE MANUAL

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**Service  
Service  
Service**



# Service Manual

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## Technical data

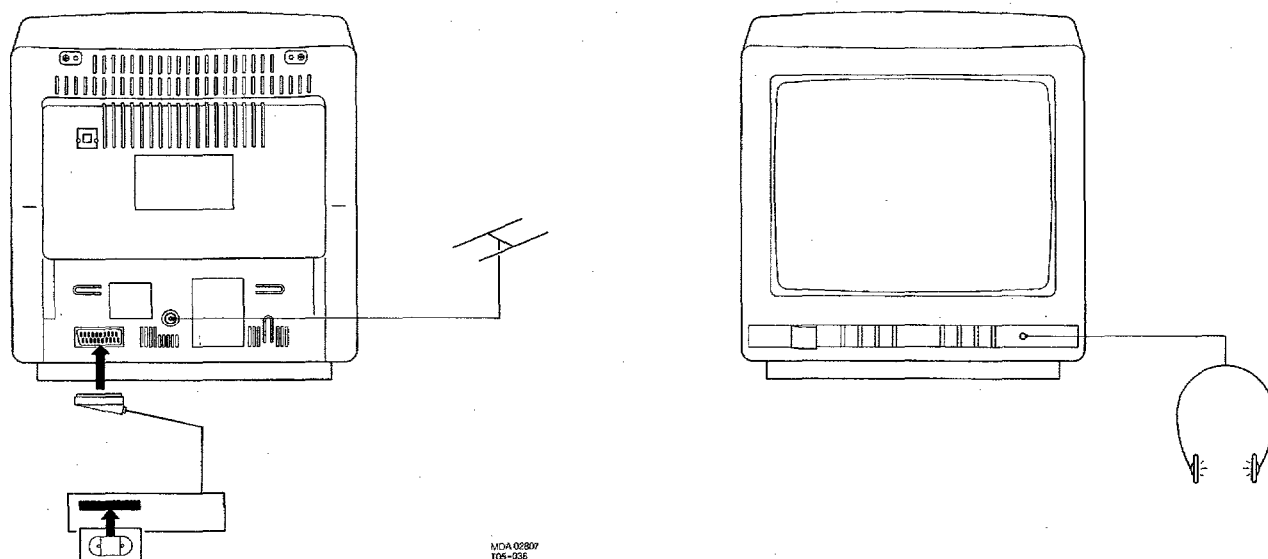
Mains voltage	: 220-240 V $\pm$ 10 %, 50 Hz $\pm$ 5 %
Aerial input impedance	: 75 $\Omega$ - coax
Minimum aerial input VHF	: 30 $\mu$ V
Minimum aerial input UHF	: 40 $\mu$ V
Maximum aerial input	: 180mV
Pull-in range colour sync	: $\pm$ 300Hz
Pull-in range horizontal sync	: $\pm$ 600Hz
Pull-in range vertical sync	: $\pm$ 5Hz
Picture tube range	: 14", 15" and 17"

### Euro connector:



- 1 - Audio  $\rightarrow$  L 0.5Vrms/ $\leq$ 1k $\Omega$
- 2 - Audio  $\rightarrow$  R 0.2 - 2Vrms/ $\geq$ 10k $\Omega$
- 3 - Audio  $\rightarrow$  L 0.5Vrms/ $\leq$ 1k $\Omega$
- 4 - Audio  $\downarrow$
- 5 - Blue  $\downarrow$
- 6 - Audio  $\rightarrow$  L 0.2 - 2Vrms/ $\geq$ 10k $\Omega$
- 7 - Blue 0.7V<sub>pp</sub>/75 $\Omega$
- 8 - Status CVBS 0 - 2V (L) 10 - 12V (H)
- 9 - Green  $\downarrow$
- 11 - Green 0.7V<sub>pp</sub>/75 $\Omega$
- 13 - Red  $\downarrow$
- 15 - Red 0.7V<sub>pp</sub>/75 $\Omega$
- 16 - Status RGB 0 - 0.4V/75 $\Omega$  (L) 1 - 3V/75 $\Omega$  (H)
- 17 - CVBS  $\rightarrow$   $\downarrow$
- 18 - CVBS  $\rightarrow$   $\downarrow$
- 19 - CVBS  $\rightarrow$  1V<sub>pp</sub>/75 $\Omega$
- 20 - CVBS  $\rightarrow$  1V<sub>pp</sub>/75 $\Omega$
- 21 - Earth screen

### Head phone:

- 8 - 1000 $\Omega$  3.5 mm mini jack







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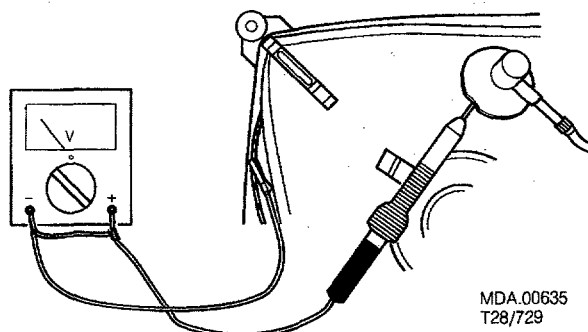
1. A set to be repaired should always be connected to the mains via a suitable isolating transformer.
2. Safety regulations demand that the set be restored to its original condition and that components identical with the original types be used. Safety components are marked by the symbol .
3. To prevent damage to ICs and transistors any flash-over of the EHT should be avoided. To prevent damage to the picture tube the method, indicated in Fig. 1, has to be applied to discharge the picture tube. Make use of an EHT probe and a universal meter (position DC-V). Discharge until the reading of the meter is 0V (after approx. 30s).
4. **ESD**   
All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair may reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools on the same potential.
5. Together with the deflection unit and the possible multipole unit the flat square picture tubes applied form one whole. The deflection and multipole units have been adjusted optimally in the factory. Adjustment of these units during repair is thus not recommended.
6. The EHT cable has been bonded in the line output transformer. It can thus not be replaced.
7. Proceed with care when testing the EHT section and the picture tube.
8. Never replace any modules or any other parts while the set is switched on.
9. Wear safety goggles during replacement of the picture tube.
10. Use plastic instead of metal alignment tools. This in order to preclude short-circuit or to prevent a specific circuit from being rendered unstable.

## 1. Service default mode

The service default mode (SDM) is a fixed, defined state the set can be brought in. All controls are in a fixed position and the automatic switch-off feature is disabled. The set accepts all commands via the remote control or the local keyboard.

To switch on the SDM, connect pin 7 of IC7600 to ground and switch on the set with the mains switch. The SDM can be left by switching the set into stand-by or by switching off the set with the mains switch.

2. The direct voltages and waveforms should be measured relative to the nearest earthing point on the printed circuit board.
3. The direct voltages and oscillograms are measured with a switched on service default mode. Use a colour bar pattern of pattern generator PM5515 as input signal.
4. If necessary, the oscillograms and DC voltages are measured with  and without  aerial signal. Voltages in the power supply section have been measured for both normal operation  and in the stand-by mode . These values have been indicated by means of the corresponding symbols.
5. The components, mentioned in the parts lists, are per position completely interchangeable with the components in the set, irrespective of the possible type indications.
6. The picture tube board is provided with printed spark gaps. Each spark gap is arranged between an electrode of the picture tube and the aquadag coating.



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Fig. 1

## 7. Servicing of SMDs (Surface Mounted Devices)

### 7.1 General cautions on handling and storage.

- Oxidation on the SMDs terminals results in poor soldering. Do not handle SMDs with bare hands.
- Avoid for storage places that are sensitive to oxidation such as places with sulfur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity.  
As a result the capacitance or resistance value of the SMDs may be affected.
- Rough handling of circuit boards containing SMDs may cause damage to the components as well as the circuit boards. Circuit boards containing SMDs should never be bent or flexed. Different circuit board materials expand and contract at different rates when heated or cooled and the components and/or solder connections may be damaged due to the stress. Never rub or scrape chip components as this may cause the value of the component to change. Similarly, do not slide the circuit board across any surface.

### 7.2 Removal of SMDs

- Heat the solder (for 2-3 seconds) at each terminal of the chip. Small components can, by means of litz wire and a limited horizontal force, be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 2) or
- While holding the SMD with a pair of tweezers take it off gently using the soldering iron's heat applied to each terminal (see Fig. 2B).
- Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 2C).

#### Caution on removal:

- When handling the soldering iron, use suitable pressure and be careful.
- When removing the chip, do not use undue force with the pair of tweezers.
- The soldering iron to be used (approx. 30 W), must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
- The chip, once removed, must **never** be used again.

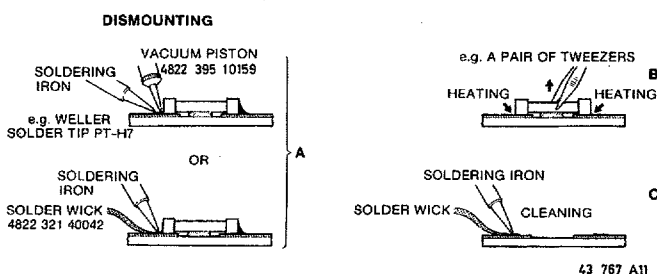


Fig. 2

### 7.3 Attachment of SMDs

- Locate the SMD on the solder lands by means of tweezers and solder the component at one side. Ensure that the component is positioned well on the solder lands (see Fig. 3A).
- Next complete the soldering of the terminals of the component (see Fig. 3B).

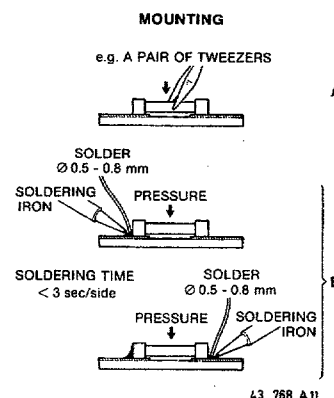


Fig. 3

#### Caution on attachment:

- When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering must be as quick as possible; care must be taken to avoid damage to the terminals and the body itself.
- Keep the SMD's body in contact with the printed board when soldering.
- The soldering iron to be used (approx. 30 W) must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
- Soldering should not be done outside the solder land.
- Soldering flux (of rosin) may be used but should not be acidic.
- After soldering, let the SMD cool down gradually at room temperature.
- The quantity of solder must be proportional with the size of the solder land. If the quantity is too great, the SMD might crack or the solder lands might be torn loose from the printed board (see Fig. 4).

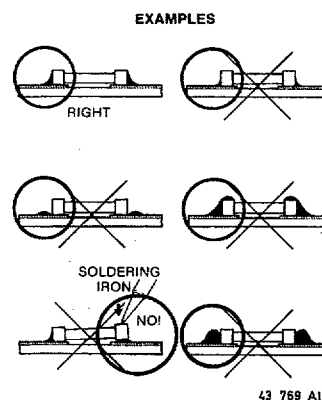


Fig. 4

## 1. Servicing position

To facilitate troubleshooting and repairing the set, the chassis can, after disconnection of the degaussing coil, be pulled out of the cabinet, turned 180°, and placed behind it (see Fig. 5).

## 2. Flat square picture tube fixation.

Demounting the picture tube:

Loosen the nuts by turning them with a box spanner hexagon (10 mm) **clockwise**, (see Fig. 6).

Mounting the picture tube:

Turn the spindles **counterclockwise** into the mask with a box spanner hexagon (4 mm).

Locate the picture tube in the mask. The easiest way is placing the cabinet with the front facing down. Position the picture tube in the middle of the mask.

Turn the spindles **clockwise** until the nut can be fixed onto the spindle.

Turn the nut **counterclockwise** finger-tight against the picture tube fixation.

Turn the spindle **clockwise** until the whole has been fixed tightly (the nut must not turn any more).

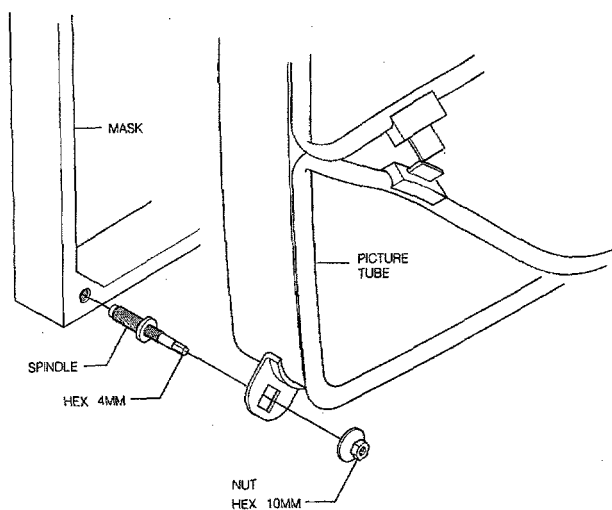
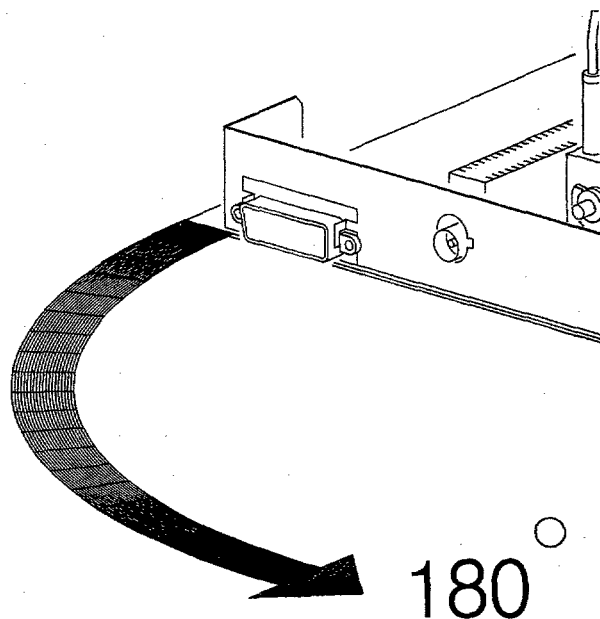


Fig. 6

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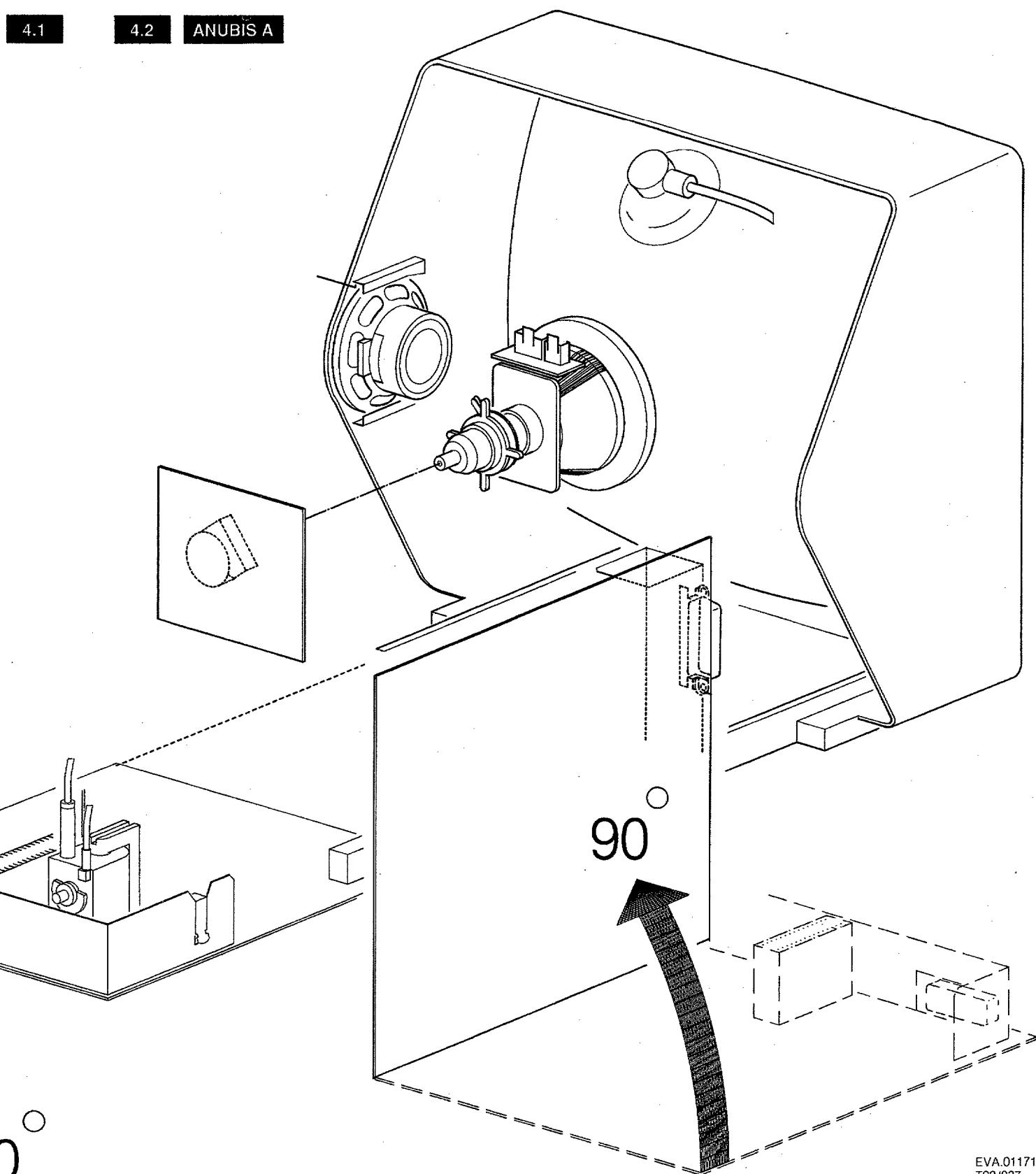
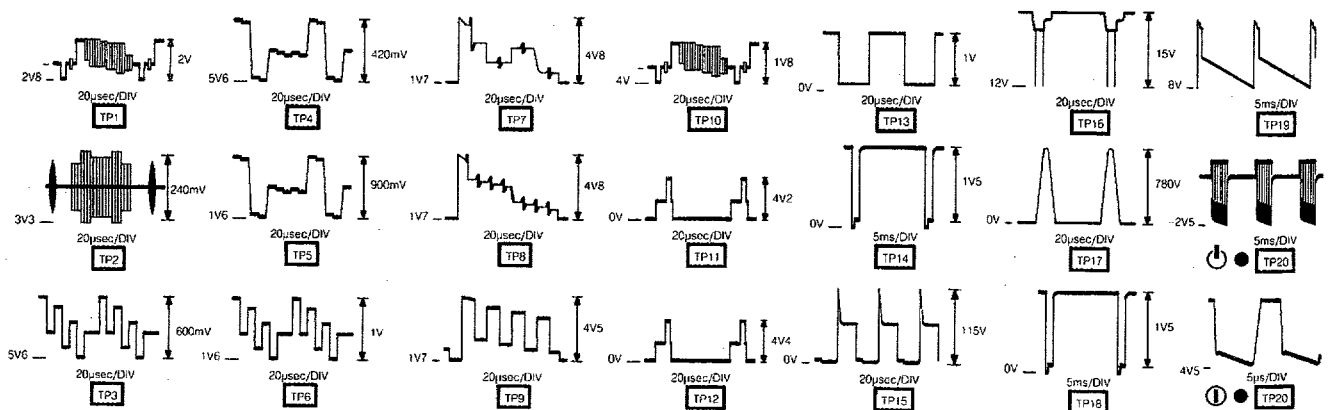
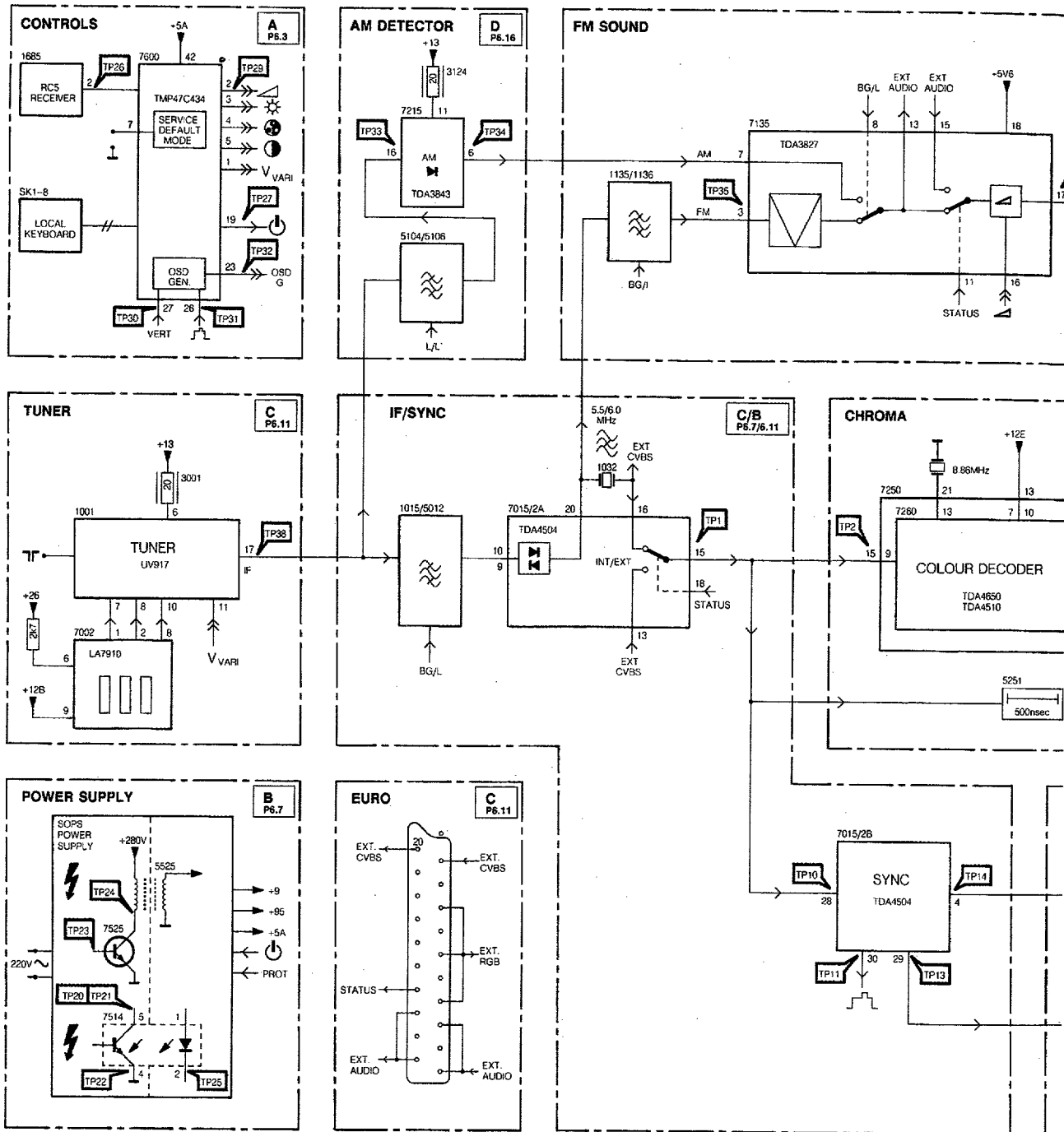
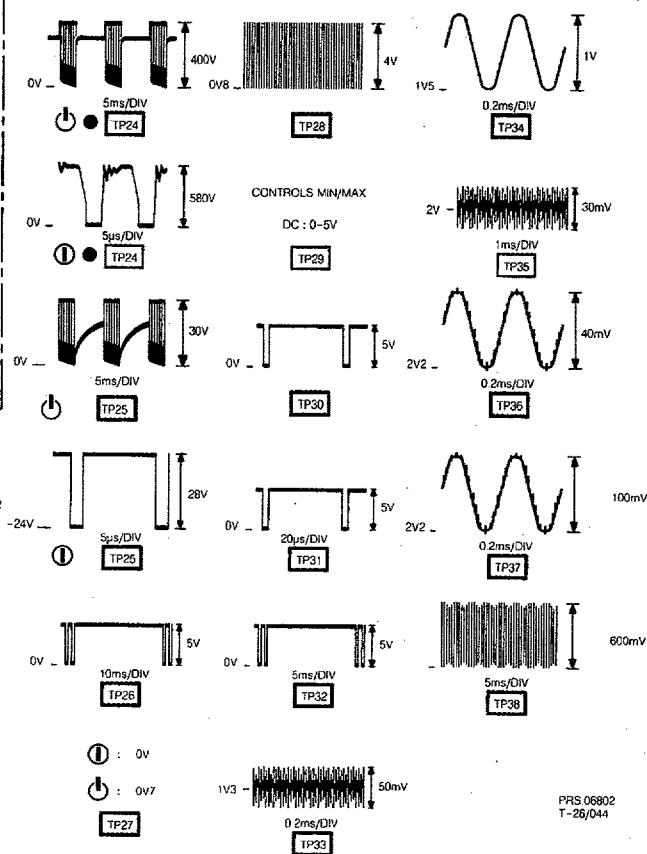


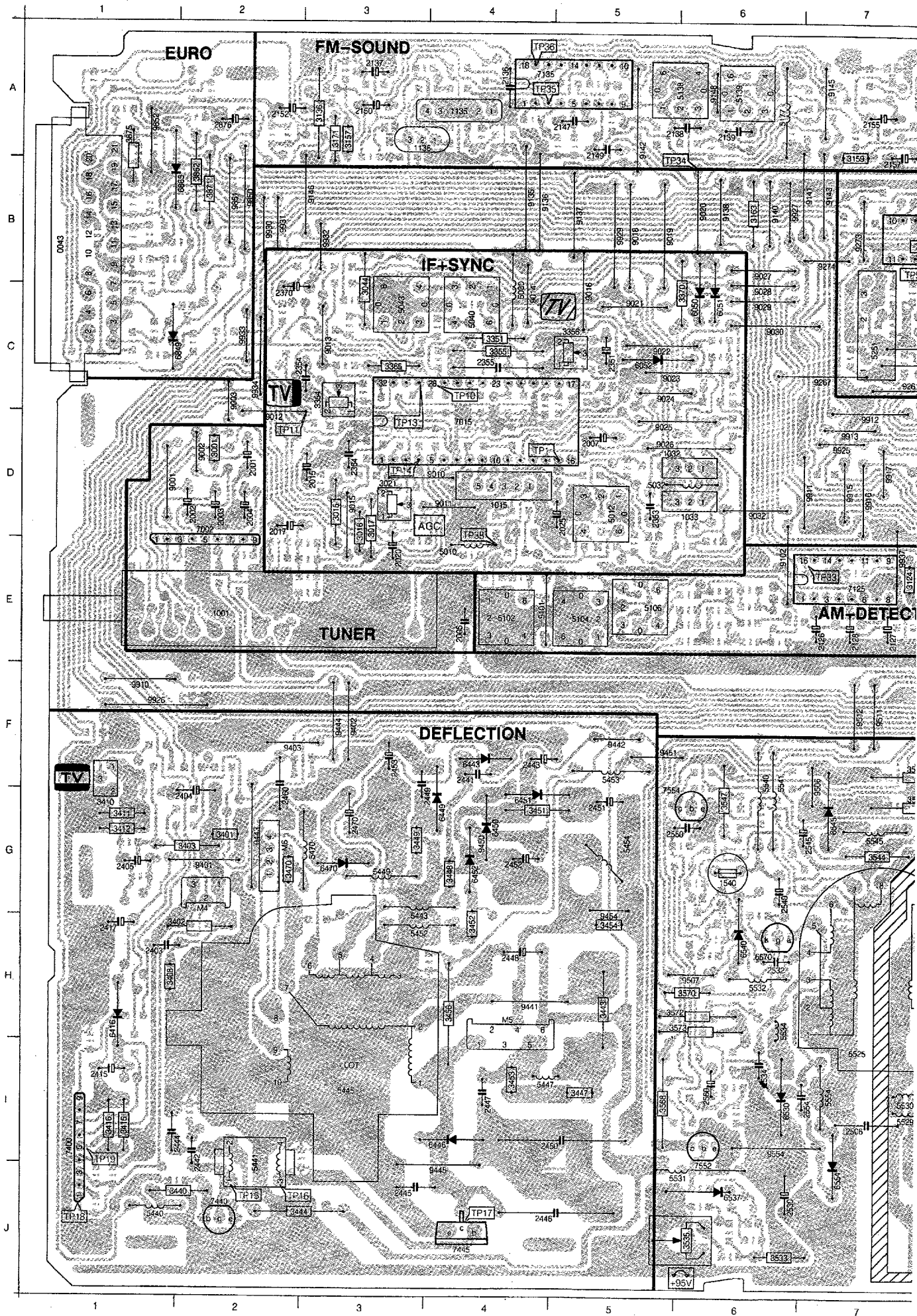
Fig. 5

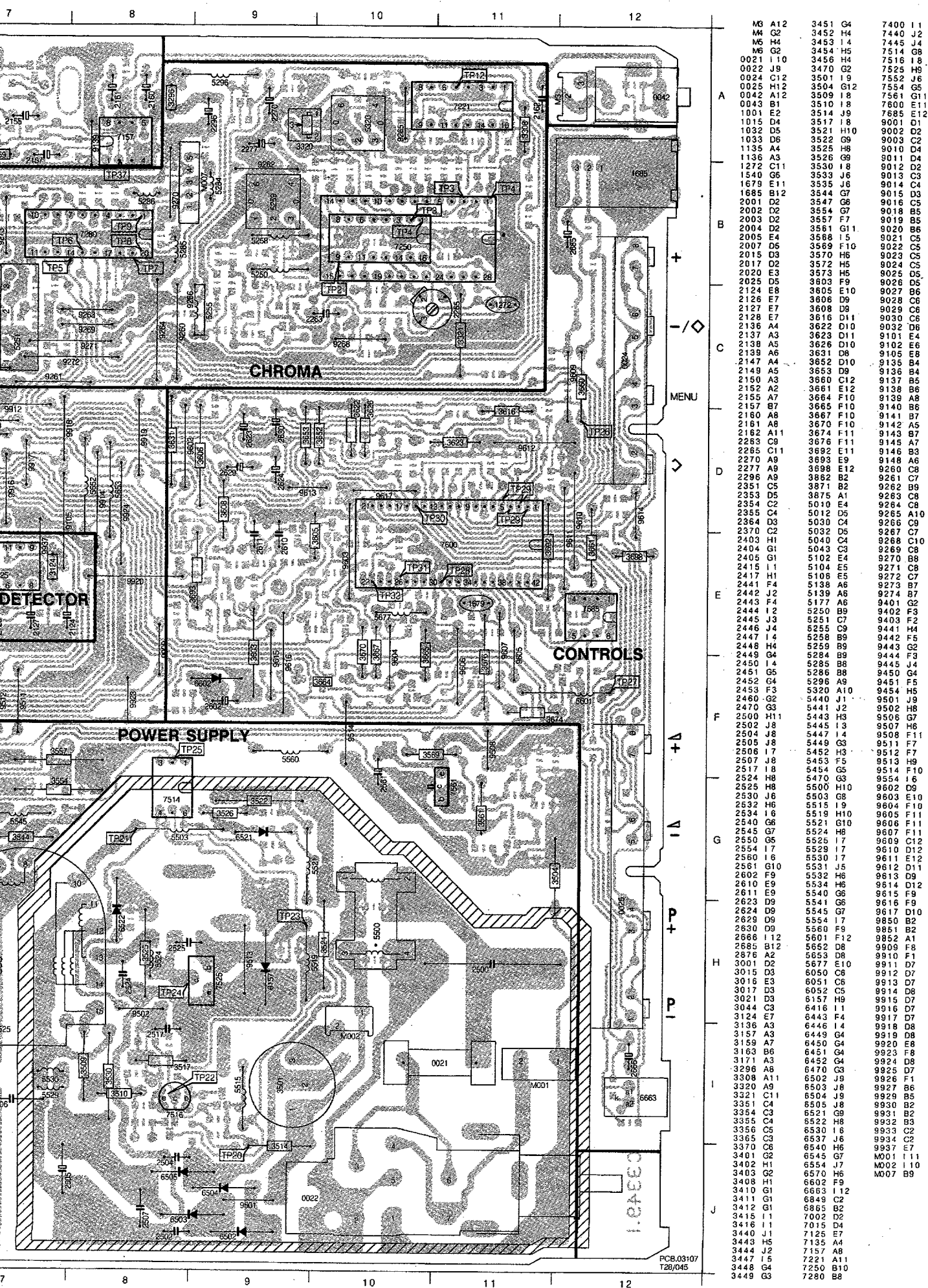
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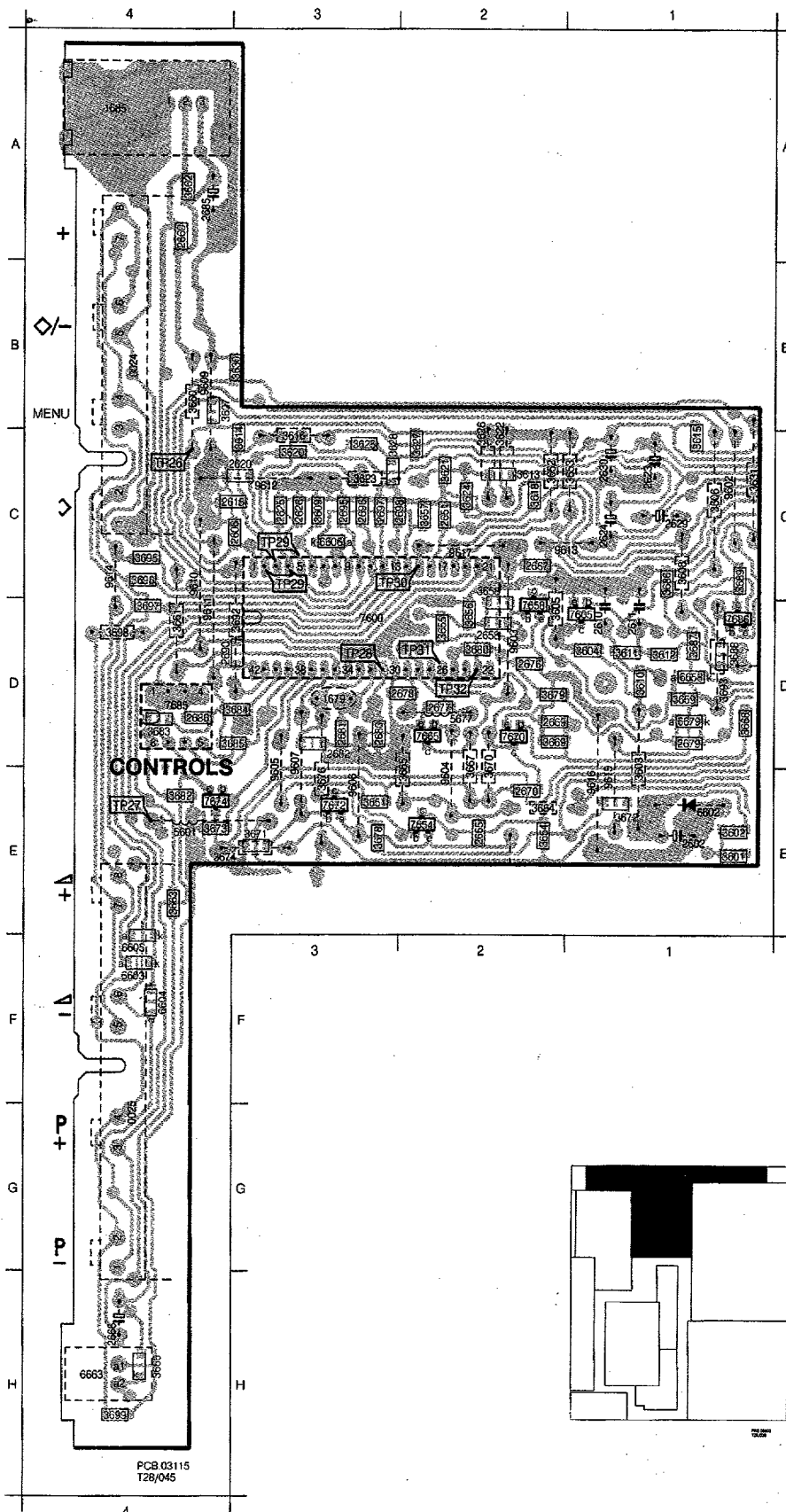






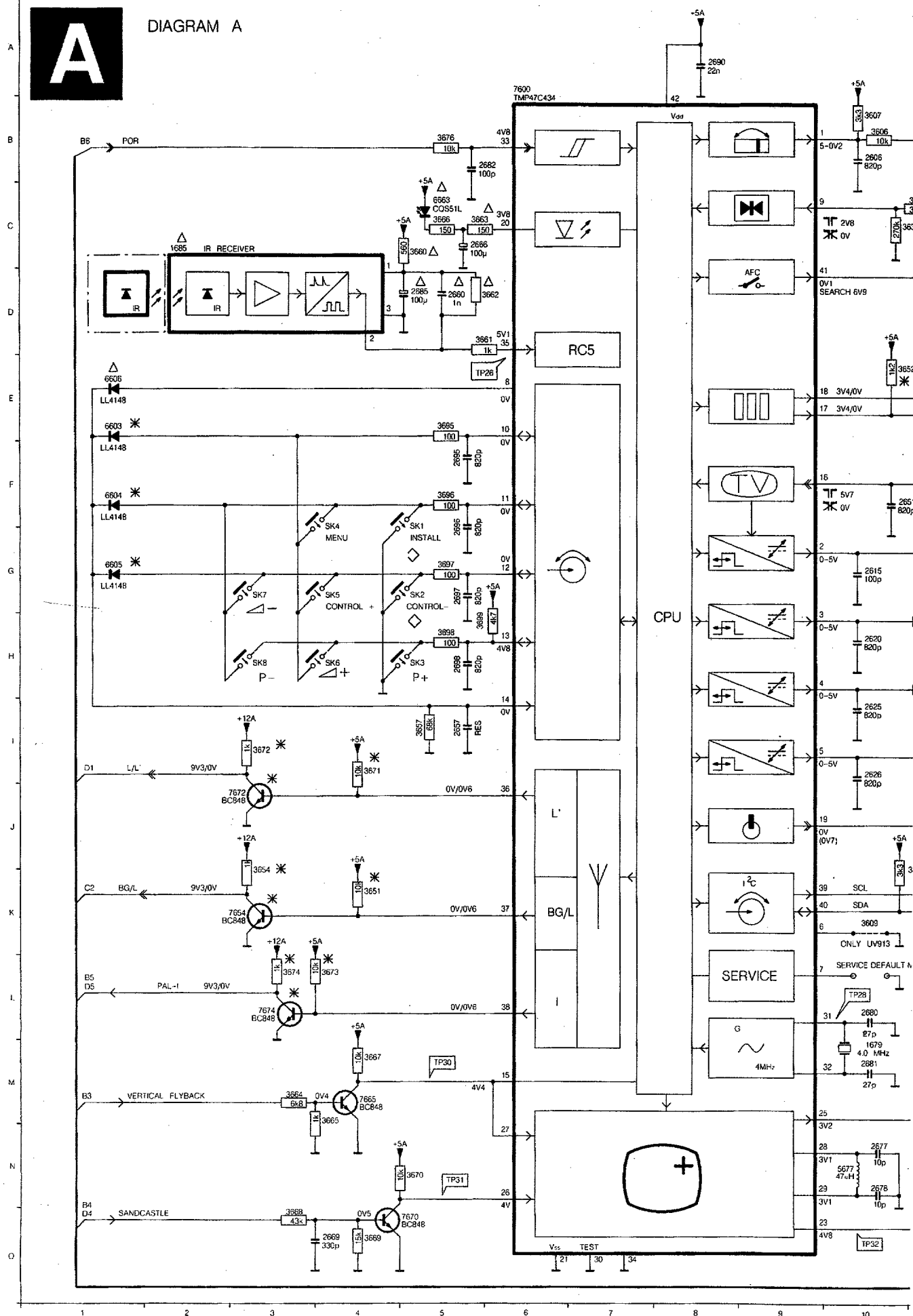
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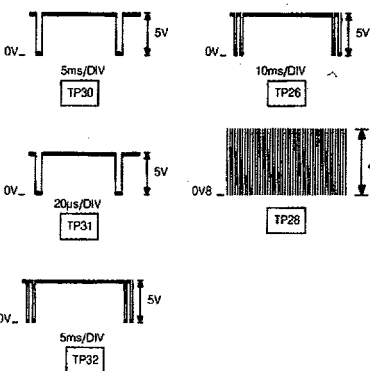
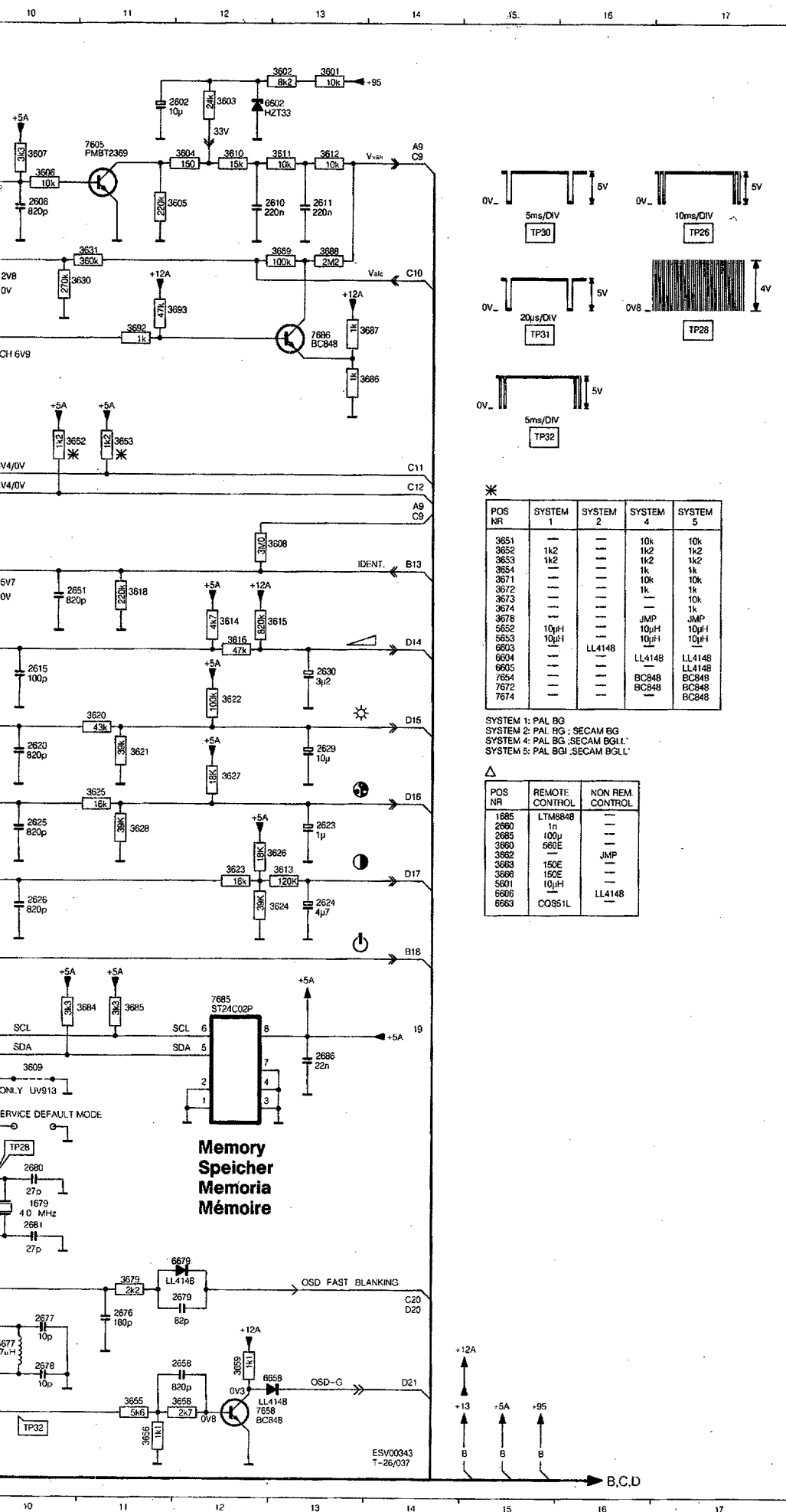
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2610 D1	7685 D4
2611 D1	7686 D1
2615 C3	9602 C1
2620 C3	9603 D2
2623 C1	9604 E2
2624 C1	9605 E3
2625 C3	9606 E3
2626 C3	9607 E3
2629 C1	9609 B4
2630 C1	9610 C4
2631 C2	9611 D4
2658 D2	9612 C3
2660 A4	9613 C1
2665 E2	9614 C4
2666 H4	9615 E1
2667 C2	9616 E1
2669 D1	9617 C2
2670 E2	
2676 D2	
2677 D2	
2678 D2	
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2681 D3	
2682 D3	
2685 A4	
2686 D4	
2690 D4	
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2696 C3	
2697 C3	
2698 C3	
3601 E1	
3602 E1	
3603 E1	
3604 D1	
3605 D2	
3606 C1	
3607 B4	
3608 C1	
3609 C3	
3610 D1	
3611 D1	
3612 D1	
3613 C2	
3614 C4	
3615 C1	
3616 C3	
3618 C2	
3620 C3	
3621 C2	
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3630 B4	
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3651 E3	
3652 C2	
3653 C2	
3654 E2	
3655 D2	
3656 D2	
3657 C2	
3658 C2	
3659 D1	
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3661 D4	
3662 A4	
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3664 E2	
3665 E2	
3666 H4	
3667 E2	
3668 D1	
3669 D1	
3670 E2	
3671 E3	
3672 E1	
3673 E4	
3674 E3	
3676 E3	
3678 E3	
3679 D2	
3680 D2	
3682 E4	
3683 D4	
3684 D3	
3685 D3	
3686 C1	
3687 D1	
3688 D1	
3689 C1	
3692 D4	
3693 D1	
3695 C4	
3696 C4	
3697 D4	
3698 D4	
3699 H4	
5601 E4	
5677 D2	
6602 E1	
6603 F4	
6604 F4	
6605 F4	
6606 C3	
6658 D1	
6663 H4	
6679 D1	
7600 D3	
7605 D1	



**A**

DIAGRAM A





\*

POS NR	SYSTEM 1	SYSTEM 2	SYSTEM 4	SYSTEM 5
3651	—	—	10k	10k
3652	1k2	—	1k2	1k2
3653	1k2	—	1k2	1k2
3654	—	—	1k	1k
3671	—	—	10k	10k
3672	—	—	1k	1k
3673	—	—	10k	10k
3674	—	—	1k	1k
3676	—	—	JMP	JMP
3652	10uH	—	10uH	10uH
5853	10uH	—	10uH	10uH
6603	—	LL4148	—	—
6604	—	—	LL4148	—
6605	—	—	LL4148	—
7654	—	—	BC848	—
7672	—	—	BC848	—
7674	—	—	BC848	—

SYSTEM 1: PAL BG  
SYSTEM 2: PAL BG; SECAM BG  
SYSTEM 4: PAL BG; SECAM BGL  
SYSTEM 5: PAL BGI; SECAM BGL

△

POS NR	REMOTE CONTROL	NON REM. CONTROL
1685	LTM8848	—
2690	1n	—
2695	100p	—
3660	560E	—
3662	JMP	—
3663	150E	—
3666	150E	—
5601	10uH	—
6606	—	LL4148
6663	COSS1L	—

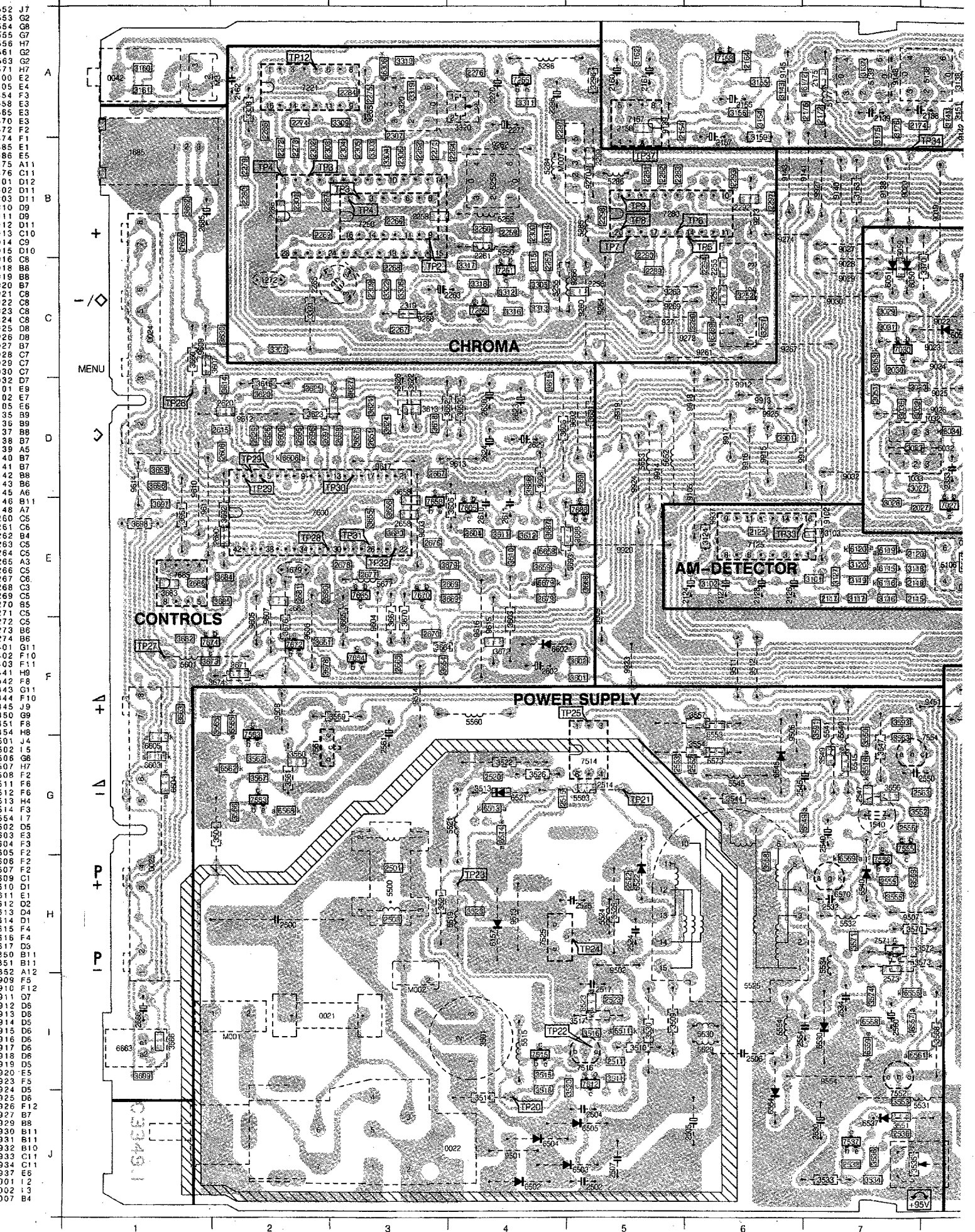
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SK6 H4  
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2602 A11  
2606 B10  
2610 B12  
2611 B13  
2615 G10  
2620 H10  
2623 I13  
2624 I13  
2625 I10  
2626 I10  
2629 H13  
2630 G13  
2651 F10  
2657 I5  
2658 N12  
2660 D5  
2666 C5  
2669 O4  
2676 N11  
2677 N10  
2678 N10  
2679 N12  
2680 L10  
2681 M10  
2682 B5  
2685 D5  
2686 K13  
2690 A8  
2695 F5  
2696 G5  
2697 G5  
2698 H5  
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3602 A13  
3603 A12  
3604 B12  
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3616 G12  
3618 F11  
3620 G11  
3621 H11  
3622 G12  
3623 I12  
3624 I13  
3625 H11  
3626 I12  
3627 H12  
3628 I11  
3630 C10  
3631 C11  
3651 K4  
3652 E10  
3653 E11  
3654 K3  
3655 O11  
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3670 N5  
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3685 K11  
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3687 D13  
3688 C13  
3689 C13  
3692 D11  
3693 C11  
3695 E5  
3696 F5  
3697 G5  
3698 H5  
3699 H5  
5677 N10  
6602 A12  
6603 E11  
6604 F1  
6605 G1  
6606 E1  
6658 N13  
6663 C5  
6679 M12  
7600 A6  
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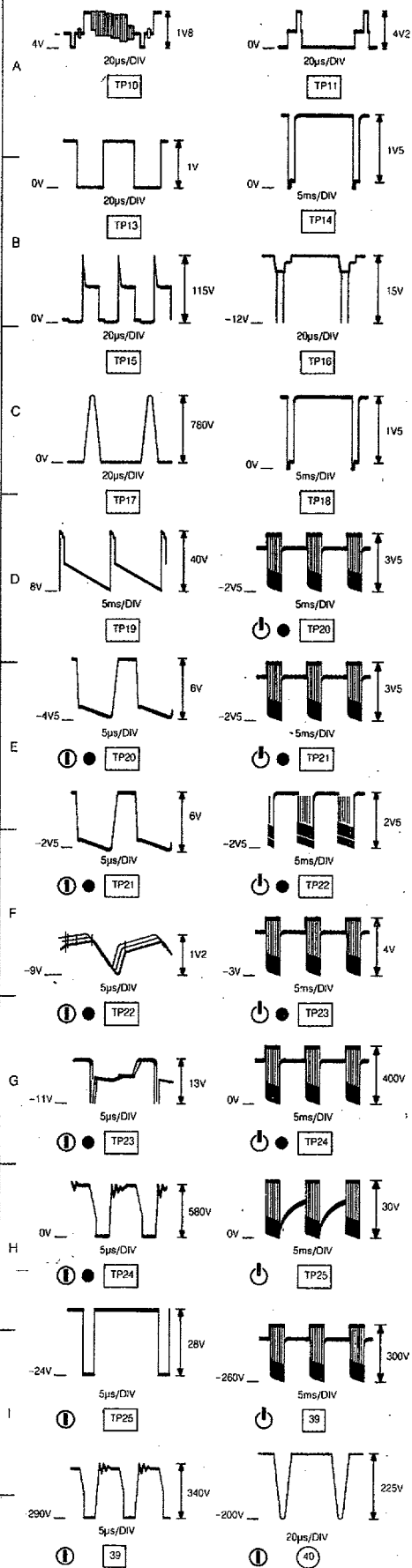
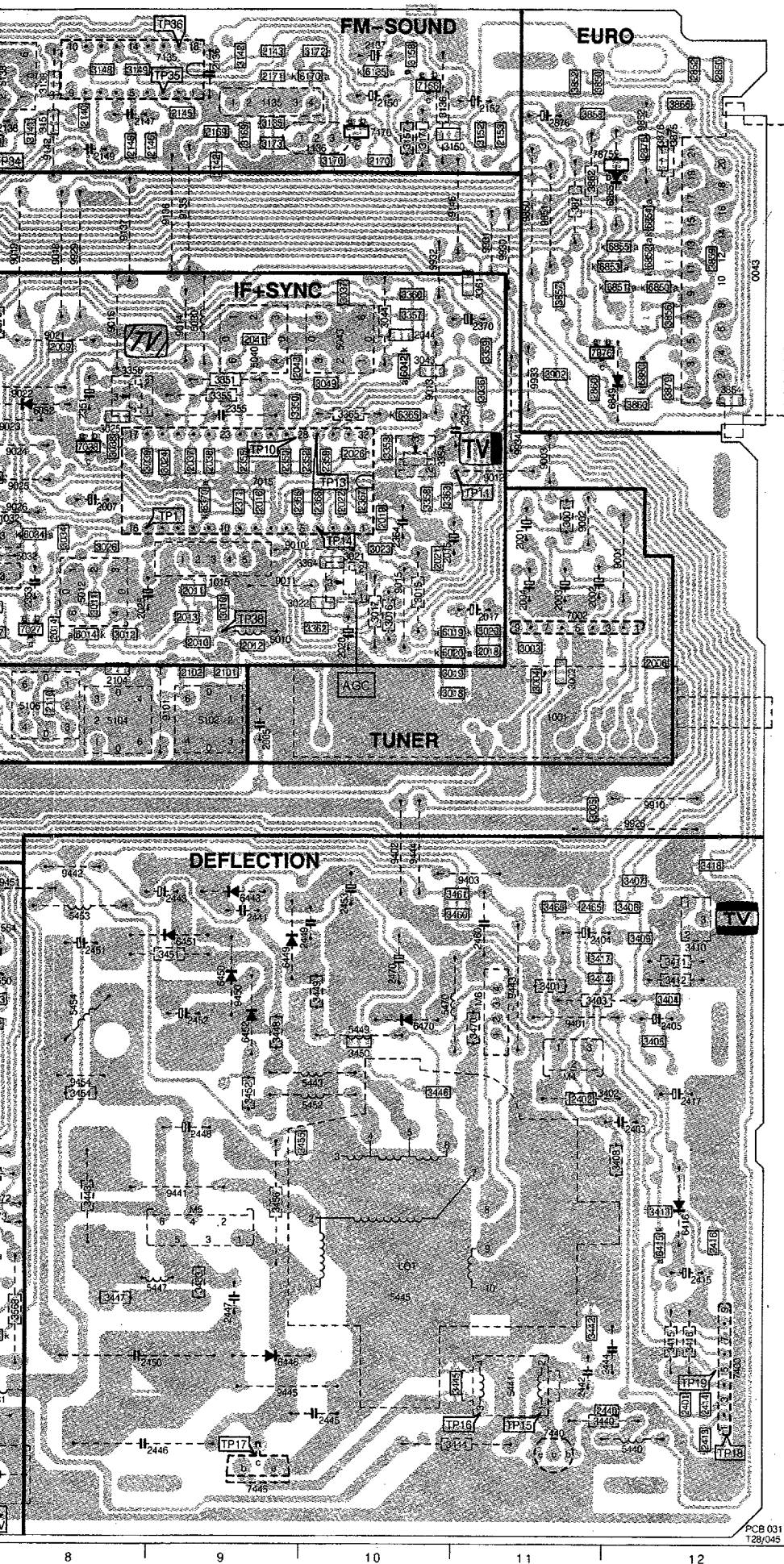
# Monocarrier

# Hauptplatine

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M5 H9	2310 C3	3033 D7	3521 H3	5259 B4	7554 G8
M6 G11	2350 D9	3034 D8	3522 G4	5284 B4	7555 G7
0021 I2	2351 C8	3035 D7	3523 H4	5285 B5	7556 H7
0022 J3	2352 D10	3036 C11	3525 H5	5286 B5	7561 G2
0024 C1	2353 D8	3037 C10	3526 G4	5320 A3	7571 H7
0025 H1	2354 C11	3038 C8	3530 I5	5320 A3	7571 H7
0042 A1	2355 C9	3039 D9	3533 J7	5440 J12	7600 E2
0043 B12	2356 D9	3043 C10	3534 J7	5441 J11	7605 E4
1001 E11	2359 D10	3044 C10	3535 J7	5443 H10	7654 F3
1015 D9	2364 D10	3049 C10	3536 J7	5445 I10	7658 E3
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1272 C2	2371 D9	3103 E7	3551 J7	5454 G8	7685 E1
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2002 D11	2405 G12	3120 E7	3556 G7	5519 H4	9002 D11
2003 D11	2413 J12	3124 E6	3557 F6	5521 G4	9003 D11
2004 D11	2414 J12	3127 E7	3558 H6	5524 H5	9010 D9
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2013 E9	2444 I12	3148 A8	3567 G2	5541 G7	9019 B8
2014 E8	2445 J10	3149 A8	3568 I8	5545 G6	9020 B7
2015 D10	2446 J9	3150 A10	3569 F2	5549 I6	9021 C8
2016 D9	2447 I9	3151 A8	3570 H7	5560 F4	9022 C8
2017 E11	2448 H9	3152 A11	3571 H7	5601 F1	9023 C8
2018 E11	2449 G10	3154 A6	3572 H7	5652 D5	9024 C8
2019 D10	2450 I8	3155 A6	3573 H7	5653 D5	9025 D8
2020 E10	2451 G8	3156 A6	3574 I7	5677 E3	9026 D8
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2022 D10	2453 F10	3158 A8	3580 F7	6015 E10	9028 C7
2025 E8	2460 G11	3159 B6	3601 F5	6020 E10	9029 C7
2026 C10	2465 F11	3160 A1	3602 F5	6034 D8	9030 C7
2027 E7	2470 G10	3161 A1	3603 F4	6042 C10	9032 D7
2030 C7	2500 H2	3162 A5	3604 E4	6050 C7	9101 E9
2037 D9	2501 H3	3163 B7	3605 E4	6051 C7	9102 E7
2038 D9	2502 J5	3169 A9	3606 D5	6052 C8	9105 E6
2041 C9	2503 H3	3170 B10	3607 C2	6053 C7	9135 B6
2043 C9	2504 J6	3171 A10	3608 D4	6115 E7	9136 B9
2044 C10	2505 J6	3172 A10	3609 D2	6116 E7	9137 B8
2101 E9	2506 I6	3173 A9	3610 E4	6119 E7	9138 B7
2102 E9	2507 J5	3175 B7	3611 E4	6120 E7	9139 A5
2104 E8	2511 I5	3176 A7	3612 E4	6135 A10	9140 B7
2110 E8	2514 G5	3251 C6	3613 D3	6157 H4	9141 B7
2115 E7	2515 G4	3252 C6	3614 D2	6170 A9	9142 B8
2117 E7	2517 I5	3253 C6	3615 D4	6172 A7	9143 B6
2118 E7	2520 G4	3289 C6	3616 D2	6289 C6	9145 A6
2120 E7	2522 H5	3296 A5	3618 D3	6306 A3	9146 B11
2124 E6	2523 I5	3303 B3	3620 D2	6365 C10	9148 A7
2125 E6	2524 H5	3304 B3	3621 D3	6370 D9	9260 C5
2126 E6	2525 H5	3305 C4	3622 D3	6415 I12	9261 C6
2127 E6	2530 J7	3306 C3	3623 D2	6416 I2	9262 B4
2128 E6	2532 H7	3307 C2	3624 D3	6443 F9	9263 C5
2136 A9	2533 J7	3308 A2	3625 D2	6446 I9	9264 C5
2137 A10	2534 I7	3309 A3	3626 D3	6449 G9	9265 A3
2138 A8	2536 J7	3310 A3	3627 D3	6450 G9	9266 C5
2139 A7	2539 G7	3311 A4	3628 D3	6451 G8	9267 C8
2140 A8	2545 G6	3312 C4	3630 C2	6452 C8	9268 C3
2142 B9	2547 G7	3313 C4	3631 D5	6470 G10	9269 C5
2143 A9	2550 G7	3314 B4	3631 F2	6502 J4	9270 B5
2145 A9	2553 G5	3315 C4	3632 D4	6503 J5	9271 C5
2146 A9	2554 I6	3316 C4	3633 D4	6504 J4	9272 C5
2147 A8	2555 H7	3317 C4	3634 F3	6505 J5	9273 B8
2148 A8	2556 G7	3318 C4	3635 E3	6511 E5	9274 B9
2149 B8	2560 I7	3319 A3	3636 E3	6513 G4	9401 G11
2150 A10	2561 G3	3320 A4	3637 D3	6514 G4	9402 F10
2152 A11	2562 G6	3321 C2	3638 D3	6515 G7	9403 F11
2153 A11	2563 G7	3322 C3	3639 E4	6516 G7	9441 H9
2154 B5	2573 I7	3350 C9	3660 C1	6521 G4	9442 F8
2155 A6	2602 F4	3355 C9	3661 E1	6522 H5	9443 G11
2157 B6	2606 D2	3353 C10	3662 B1	6523 B5	9444 F10
2158 A5	2610 E4	3354 D10	3663 F1	6530 I7	9445 J9
2160 A5	2611 E4	3355 C9	3664 F3	6537 J7	9450 G9
2161 A5	2615 D2	3356 C8	3665 F3	6540 H7	9451 F8
2162 A2	2620 D2	3357 C10	3666 I1	6545 G6	9454 H8
2164 A6	2623 D4	3358 D10	3667 F3	6549 G7	9501 J4
2169 A9	2624 D4	3359 C11	3668 E5	6553 G6	9502 I5
2170 B10	2625 D2	3360 B10	3669 E3	6554 I8	9506 G6
2171 A9	2626 D2	3361 B11	3670 F3	6555 I7	9507 H7
2172 A7	2629 D4	3362 E10	3671 F2	6557 I7	9508 F2
2174 A7	2630 D4	3363 D10	3672 F4	6558 I7	9511 F6
2175 A7	2631 D3	3364 D9	3673 F1	6559 I7	9512 F6
2176 A7	2635 E3	3365 C10	3674 F1	6561 I7	9513 H4
2255 C6	2660 B1	3370 C8	3676 F2	6562 C2	9514 F3
2256 C5	2665 F3	3401 G11	3678 F2	6565 F2	9554 I7
2257 C4	2666 I1	3402 H11	3679 E3	6568 G2	9602 D5
2258 B3	2667 D3	3403 G11	3680 E3	6569 H7	9603 E3
2259 B4	2669 E3	3404 G12	3682 F1	6570 H7	9604 F3
2260 B4	2670 F3	3405 G12	3683 E1	6573 G6	9605 F2
2261 C4	2676 F3	3406 F12	3684 E2	6602 F4	9606 F2
2262 B3	2677 E3	3407 F12	3685 E2	6603 G1	9607 F2
2263 C3	2678 E3	3408 H12	3686 D4	6604 G1	9609 C1
2264 B4	2679 E4	3409 G12	3687 E4	6605 G1	9610 D1
2265 C2	2680 E2	3410 G12	3688 E5	6606 D2	9611 E1
2266 B3	2681 E2	3411 G12	3689 D5	6608 E4	9612 D2
2267 C3	2682 E2	3412 G12	3692 E2	6609 I1	9613 D4
2268 C3	2685 B1	3413 H12	3693 E5	6679 E4	9614 D1
2269 B2	2686 E1	3414 G11	3695 D1	6849 C12	9615 F4
2270 A4	2690 E2	3415 I12	3696 D1	6850 B12	9616 F4
2271 B3	2695 D2	3416 I12	3697 E1	6851 B12	9617 D3
2272 B2	2696 D2	3417 G11	3698 E1	6852 B12	9618 B11
2273 B2	2697 D2	3418 F12	3699 I1	6853 B11	9619 B11
2274 A2	2698 D3	3440 J11	3850 A11	6854 B12	9652 A12
2275 A3	2850 A12	3442 I11	3852 A11	6855 B12	9909 F5
2276 A4	2852 A12	3443 H8	3854 C12	6865 B12	9910 F12
2277 A4	2860 C11	3444 J10	3856 C12	6880 C12	9911 D7
2279 B2	2875 A12	3445 J11	3857 B11	7002 D11	9912 D6
2280 B2	2876 A11	3446 H10	3858 A11	7015 D9	9913 D6
2281 B5	3001 D11	3447 I8	3859 B12	7027 E8	9914 D5
2282 B5	3002 E11	3448 C9	3860 C12	7030 C7	9915 D6
2283 B5	3003 E11	3449 G10	3862 B11	7038 C8	9916 D6
2284 A3	3004 E11	3450 G10	3866 A12	7125 E6	9917 D6
2285 B2	3005 F11	3451 G9	3871 B11	7135 A9	9918 D6
2286 B2	3010 D9	3452 H8	3875 A12	7156 A10	9919 D5
2287 B2	3011 D8	3453 I9	3876 A12	7157 A5	9920 E5
2289 C5	3012 E8	3454 H8	3879 C12	7158 A6	9923 F5
2290 C5	3015 D10	3455 H10	3901 D6	7170 A10	9924 D5
2291 B6	3016 E10	3456 H9	3902 C11	7221 A2	9925 D6
2292 B6	3017 E10	3458 F10	5010 E9	7250 B3	9926 F12
2293 B6	3018 E10	3461 F10	5012 D8	7251 C4	9927 B7
2294 C6	3019 E10	3465 F11	5030 C9	7256 C4	9929 B8
2296 A4	3020 E11	3470 G11	5032 D8	7258 A4	9930 B11
2297 B4	3021 D10	3501 I4	5040 C9	7280 B5	9931 B11
2298 B5	3022 D9	3504 G2	5043 C10	7400 I12	9932 B10
2299 B5	3023 D10	3509 I5	5102 E9	7440 J11	9933 C11
2300 B4	3024 D9	3510 I5	5104 E8	7445 J9	9934 C11
2301 B2	3025 C8	3511 I5	5106 E8	7512 E5	9937 E5
2302 B2	3026 D8	3513 G4	5139 A8	7514 G5	M001 I2
2303 B3	3027 D7	3514 J4	5139 A7	7515 I4	M002 I3
2304 B3	3028 E7	3515 I4	5177 A7	7516 I5	M007 B4
2305 B3	3029 C7	3516 I5	5250 B4	7525 H4	
2306 B3	3030 D7	3517 I5	5251 C6	7537 J7	



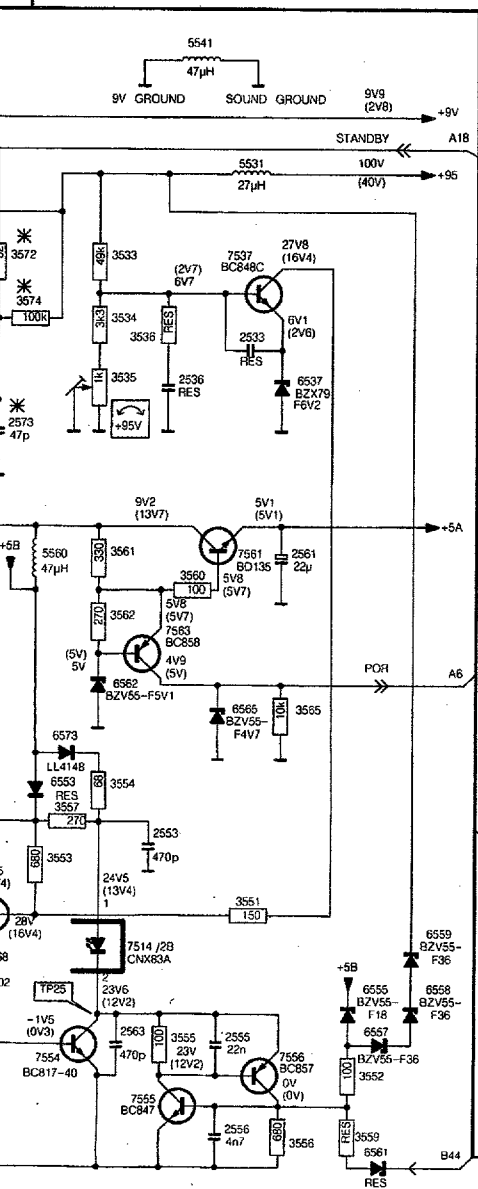




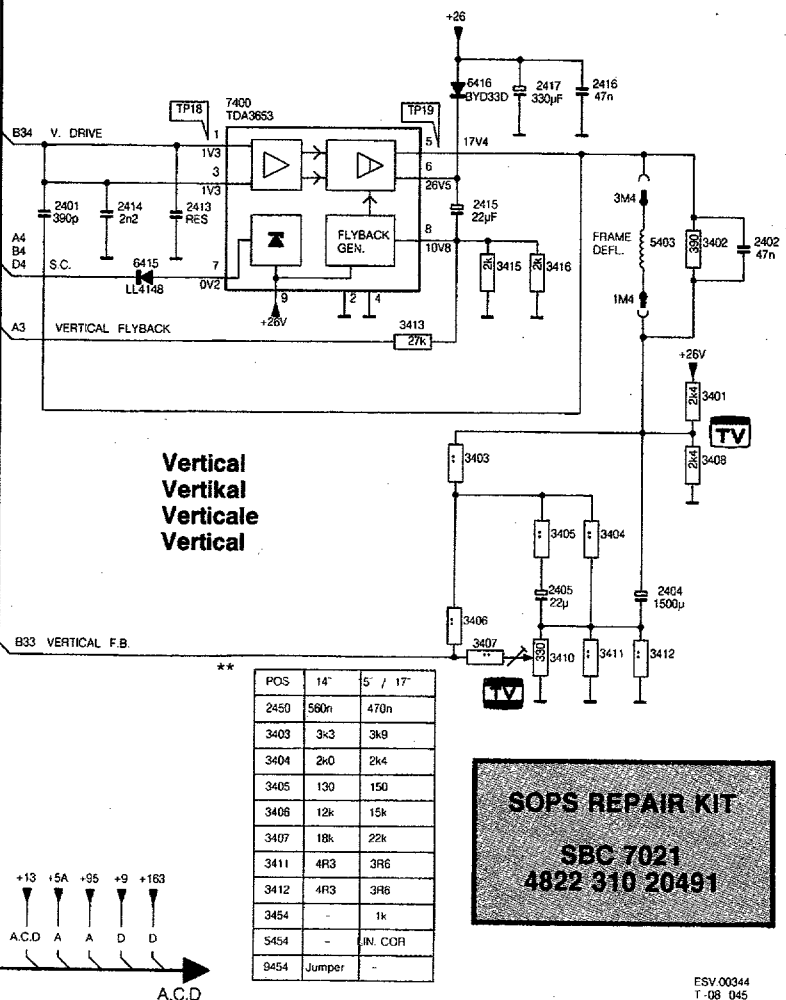
POS NR	SYSTEM 4	SYSTEM 5
3050	3k3	3k3
3365	2M2	2M2
6050	1N4148	1N4148
6365	LL4148	LL4148

SYSTEM 4: PAL BG :SECAM BGLI  
SYSTEM 5: PAL BGI :SECAM BGLI

## Synchronization



**Vertical**  
**Vertikal**  
**Verticale**  
**Vertical**



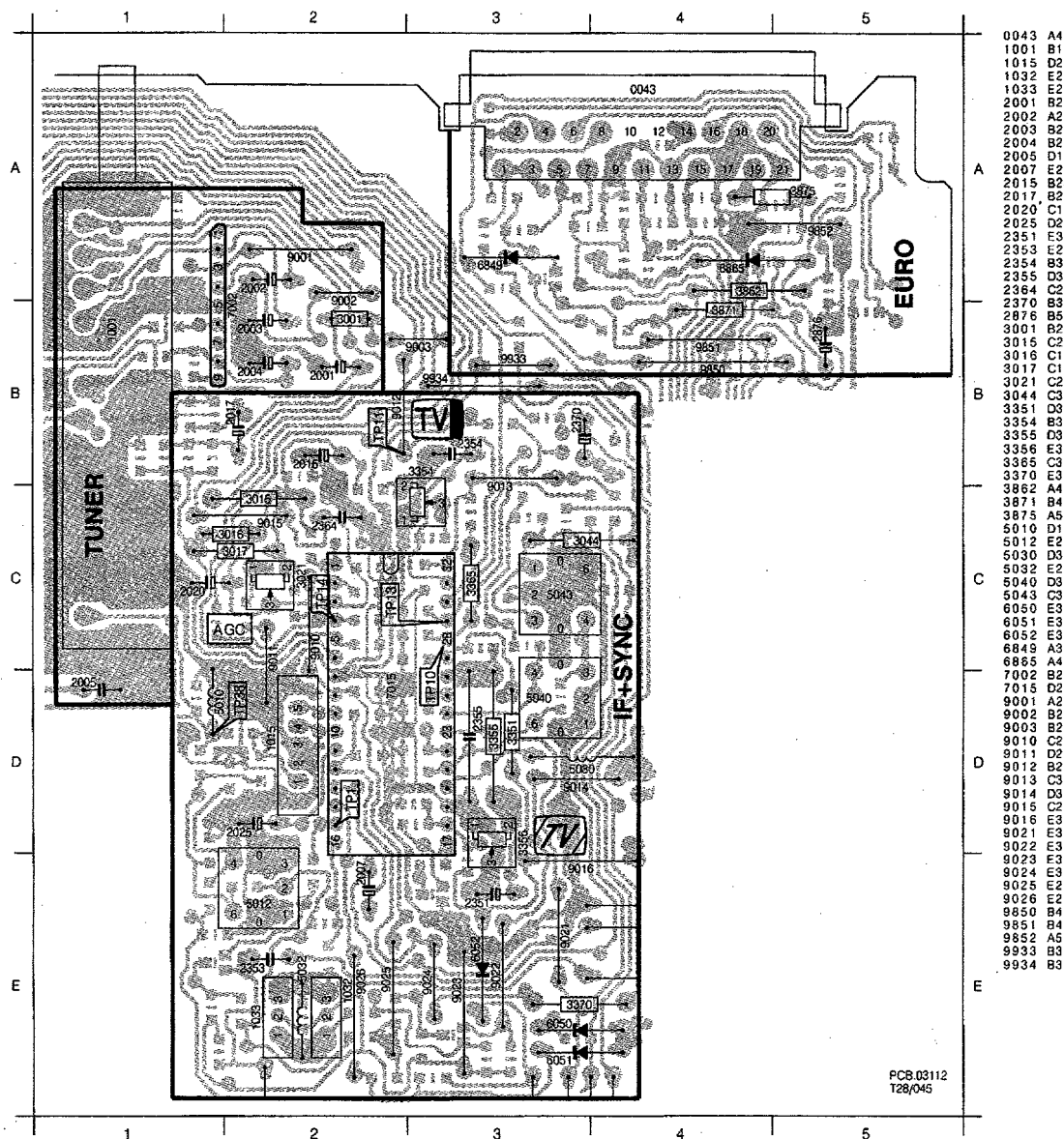
POS	14"	5' / 17"
2450	580n	470n
3403	3x3	3k9
3404	2x0	2k4
3405	130	150
3406	12k	15k
3407	18k	22k
3411	4R3	3R6
3412	4R3	3R6
3454	-	1k
5454	-	IN. COR
9454	Jumper	-

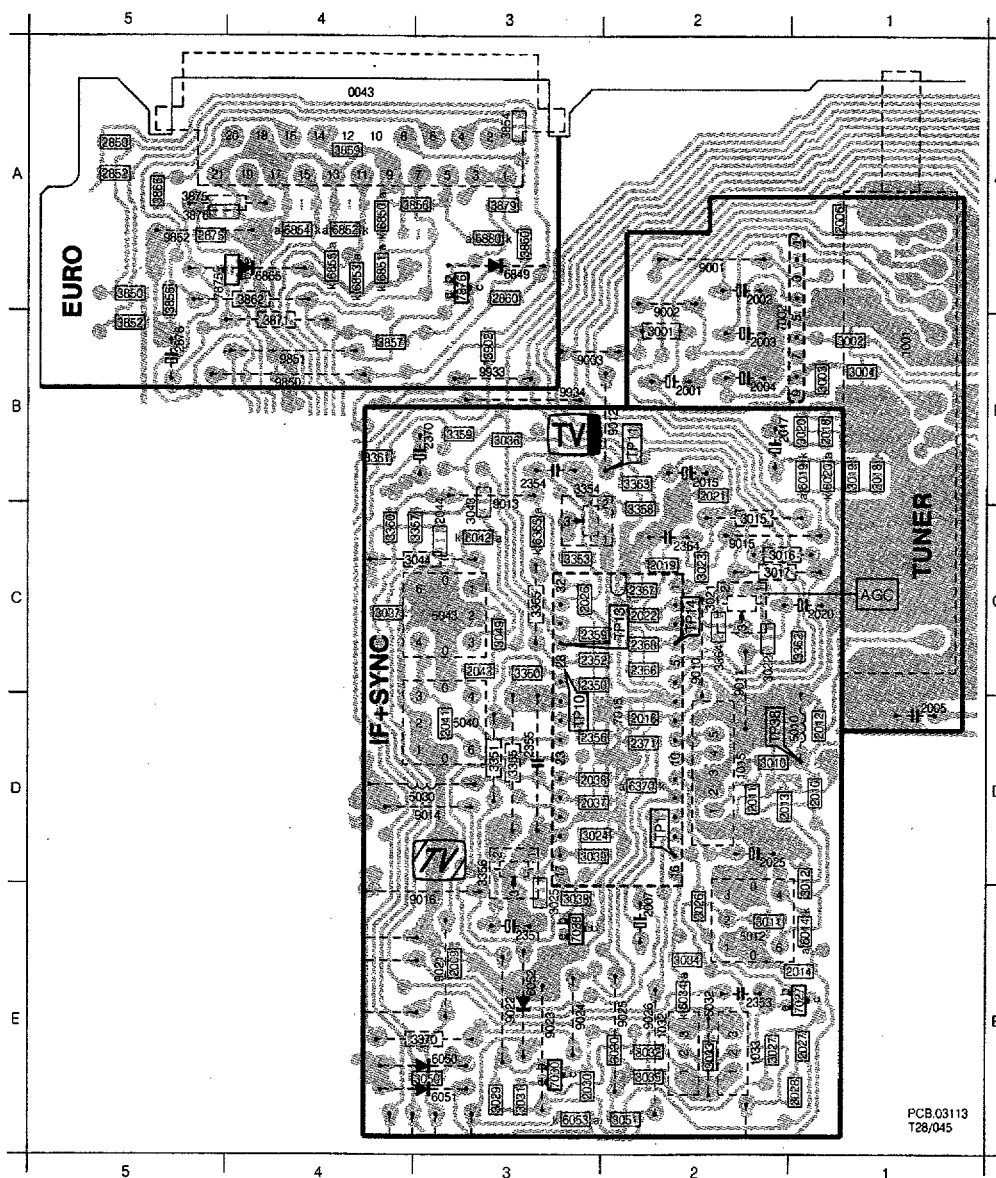
**SOPS REPAIR KIT**  
**SBC 7021**  
**4822 310 20491**

ESV.00344  
T-08 045

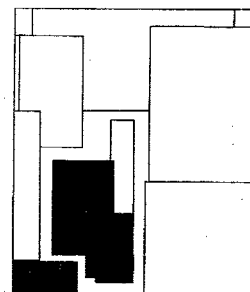
1500-F-1	3549-J-6
1540-E-6	3550-J-6
2350-A-4	3551-I-8
2351-A-3	3552-J-9
2352-B-2	3553-I-7
2353-G-1	3554-I-8
2354-C-6	3555-J-8
2355-A-5	3556-J-9
2356-C-2	3557-I-7
2359-B-6	3558-F-6
2364-D-5	3559-J-9
2365-G-1	3560-G-8
2368-D-6	3561-G-8
2370-F-3	3562-H-8
2371-D-4	3565-H-9
2401-G-10	3568-H-6
2402-G-14	3567-G-6
2404-I-13	3568-I-7
2405-I-12	3569-H-7
2413-G-11	3570-F-6
2414-G-10	3571-F-6
2415-G-12	3572-F-7
2416-B-8	3573-F-7
2417-F-12	3574-F-7
2440-C-8	5403-G-13
2441-D-13	5404-G-13
2442-G-9	5441-B-9
2443-D-13	5443-D-19
2444-B-8	5445-A-11
2445-B-10	5447-A-10
2446-B-10	5449-E-12
2448-A-10	5452-D-12
2449-E-13	5453-D-13
2450-G-14	5454-C-10
2451-C-10	5455-F-7
2452-D-13	5500-F-7
2453-E-13	5503-I-1
2460-B-12	5515-G-2
2465-C-11	5519-J-3
2467-D-12	5521-F-7
2500-F-2	5524-G-5
2501-F-2	5525-E-4
2503-F-2	5530-E-5
2504-F-2	5531-E-8
2505-F-5	5532-E-5
2506-F-5	5534-E-6
2507-F-4	5540-E-7
2511-H-1	5541-E-8
2514-I-2	5545-I-6
2515-I-2	5548-E-8
2517-I-3	6050-C-1
2520-H-4	6051-B-1
2522-H-1	6052-B-1
2523-H-4	6053-B-1
2524-F-6	6385-A-1
2525-F-6	6386-A-1
2530-F-5	6415-G-10
2532-E-6	6416-F-12
2534-E-6	6443-D-13
2535-E-6	6446-B-10
2536-F-6	6447-E-13
2540-E-7	6451-I-7
2545-I-6	6452-D-13
2547-J-6	6470-C-13
2550-J-6	6503-F-4
2551-J-6	6504-F-4
2555-J-8	6505-F-4
2556-J-8	6511-H-1
2560-G-6	6513-I-1
2561-G-6	6514-I-2
2562-G-6	6515-I-2
2563-J-8	6516-J-8
2573-G-7	6517-I-3
3000-C-1	6521-H-4
3051-B-1	6522-I-1
3054-A-4	6523-H-4
3351-A-3	6530-E-6
3352-B-1	6537-F-9
3353-B-6	6540-E-6
3354-B-7	6545-I-6
3355-A-5	6549-J-6
3356-B-6	6551-I-7
3359-A-6	6555-J-9
3362-C-6	6557-J-9
3364-D-5	6558-J-9
3365-D-5	6559-I-9
3370-F-3	6561-K-9
3401-G-13	6562-H-8
3402-G-13	6565-H-8
3403-H-12	6568-G-7
3404-H-13	6569-F-8
3405-C-12	6570-F-6
3406-H-12	6573-H-8
3407-I-12	7015-D-2
3408-H-12	7400-G-11
3410-I-12	7400-B-10
3411-I-13	7445-B-9
3412-I-13	7512-H-2
3413-G-12	7514-H-2
3415-G-12	7515-G-3
3416-G-12	7516-H-3
3440-B-8	7525-G-4
3441-B-8	7527-F-6
3443-A-11	7552-I-7
3444-H-8	7553-H-6
3445-B-9	7554-J-7
3446-C-12	7555-H-8
3447-H-11	7556-H-8
3448-D-12	7561-F-8
3449-E-12	7563-H-8
3451-C-10	7571-F-7
3452-D-12	9454-C-10
3453-D-12	SK1 - F-1
3454-C-9	
3455-B-11	
3456-B-11	
3460-B-13	
3461-B-13	
3462-C-13	
3470-C-12	
3500-I-3	
3500-G-1	
3500-H-1	
3511-H-1	
3513-I-1	
3514-I-2	
3515-G-3	
3516-G-3	
3517-I-3	
3518-G-3	
3520-G-3	
3521-G-3	
3522-H-4	
3523-G-3	
3525-I-1	
3526-H-4	
3527-H-4	
3528-G-3	
3534-F-8	
3535-F-8	
3536-F-8	
3537-F-8	
3542-J-6	





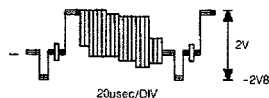
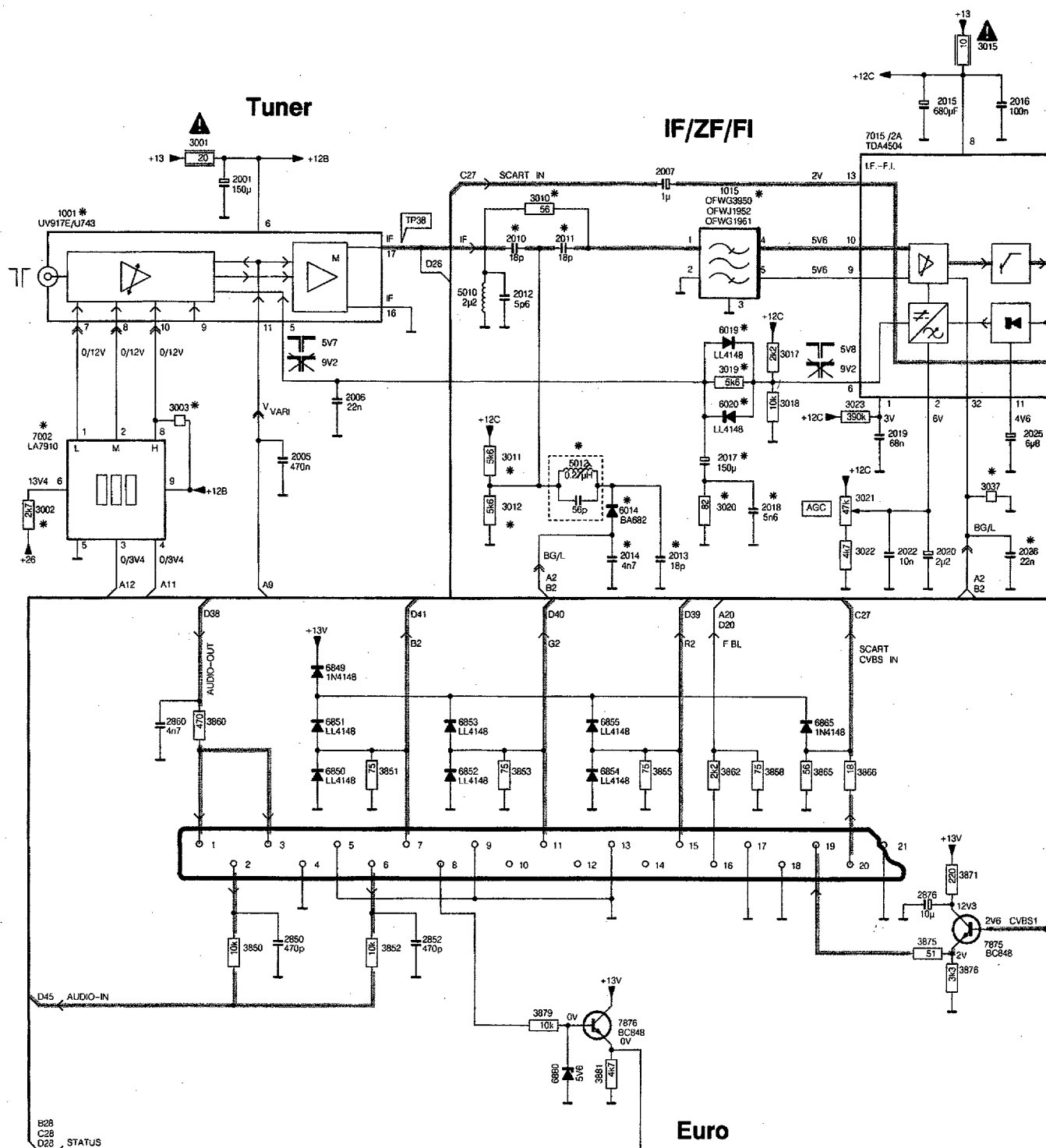


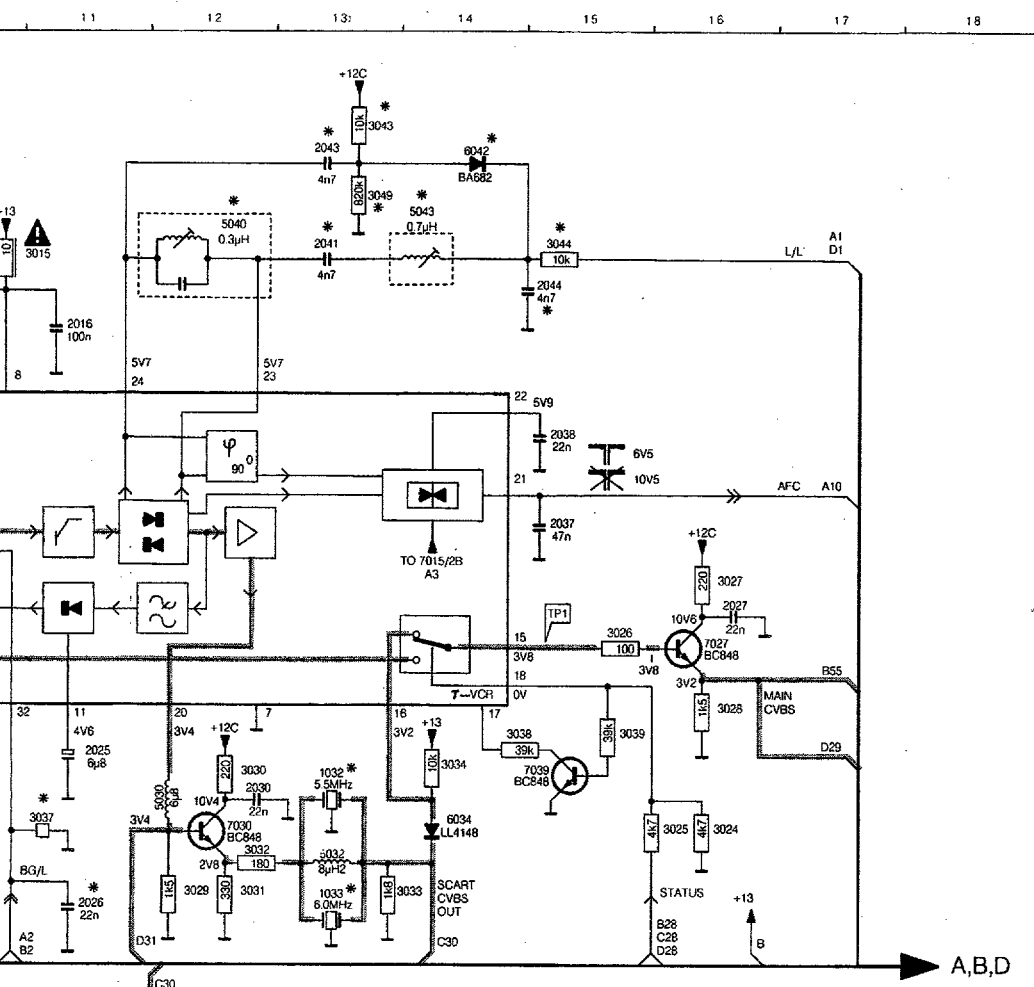
0043	A4	3035	E2	9014	D3
1001	B1	3036	B3	9015	C2
1015	D2	3037	C4	9016	E3
1032	E2	3038	E3	9021	E3
1033	E2	3039	D2	9022	E3
2001	B2	3043	C3	9023	E3
2002	A2	3044	C3	9024	E3
2003	B2	3049	C3	9025	E2
2004	B2	3050	E3	9026	E2
2005	D1	3051	E2	9850	B4
2006	A1	3350	C3	9851	B4
2007	E2	3351	C3	9852	A5
2009	C3	3353	C3	9933	B3
2010	D1	3354	B3	9934	B3
2011	D2	3355	D3		
2012	D1	3356	E3		
2013	D2	3357	C4		
2014	E1	3358	C2		
2015	B2	3359	B3		
2016	D2	3360	C4		
2017	B2	3361	B4		
2018	B1	3362	C1		
2019	C2	3363	B2		
2020	C1	3364	C2		
2021	B2	3365	C3		
2022	C2	3370	E3		
2025	D2	3850	A5		
2026	C3	3852	B5		
2027	E1	3854	A3		
2030	E3	3856	A3		
2037	D2	3857	B4		
2038	D2	3858	B5		
2041	D3	3859	A4		
2043	C3	3860	A3		
2044	C3	3862	A4		
2350	C2	3866	A5		
2351	F3	3871	B4		
2352	C2	3875	A5		
2353	E2	3876	A5		
2354	B3	3879	A3		
2355	D3	3902	B3		
2356	D2	5010	D1		
2359	C2	5012	E2		
2364	C2	5030	D3		
2366	C2	5032	E2		
2367	C2	5040	D3		
2368	C2	5043	C3		
2370	B3	6014	E1		
2371	D2	6019	B1		
2850	A5	6020	B1		
2852	A5	6034	E2		
2860	A3	6042	C3		
2875	A5	6050	E3		
2876	B5	6051	E3		
3001	B2	6052	E3		
3002	B1	6053	E3		
3003	B1	6365	C3		
3004	B1	6370	D2		
3010	D2	6849	A3		
3011	E2	6850	A4		
3012	E1	6851	A4		
3015	C2	6852	A4		
3016	C1	6853	A4		
3017	C1	6854	A4		
3018	B1	6855	A4		
3019	B1	6855	A4		
3020	B1	6860	A3		
3021	C2	7002	B2		
3022	C2	7015	D2		
3023	C2	7027	E1		
3024	D2	7030	E3		
3025	F3	7038	E3		
3026	E2	7875	A5		
3027	E2	7876	A3		
3028	E1	9001	A2		
3029	E3	9002	B2		
3030	E2	9003	B2		
3031	E3	9010	C2		
3032	E2	9011	D2		
3033	E2	9012	B2		
3034	E2	9013	C3		



**C**

DIAGRAM C





**Source selection video**  
**Bildquellenwahl**  
**Selezione sorgenti dell'immagine**  
**Sélection source image**

POS NR	SYSTEM 1	SYSTEM 2	SYSTEM 3	SYSTEM 4	SYSTEM 5
1001	UV917	U743	UV917	UV917	UV917
1015	OFWG1961	OFWJ1952	CFWG1961	CFWG3950	CFWG3950
1032	5.5MHz	-	5.5MHz	5.5MHz	5.5MHz
1033	-	6.0MHz	6.5MHz	-	6.0mhz
2010	-	-	-	18p	18p
2011	-	-	-	18p	18p
2013	-	-	-	18p	18p
2014	-	-	-	4n7	4n7
2017	100µF	100µF	100µF	150µF	150µF
2018	-	-	-	5n6	5n6
2026	-	-	-	22n	22n
2041	-	-	-	4n7	4n7
2043	-	-	-	4n7	4n7
2044	-	-	-	4n7	4n7
3010	JMP	JMP	JMP	56E	56E
3011	-	-	-	5k6	5k6
3012	-	-	-	5k6	5k6
3019	JMP	JMP	JMP	5k6	5k6
3020	JMP	JMP	JMP	82E	82E
3036	-	-	-	JMP	JMP
3037	JMP	JMP	JMP	-	-
3043	-	-	-	10k	10k
3044	-	-	-	10k	10k
3049	-	-	-	820k	820k
5012	-	-	-	0.20µH	0.20µH
5040	-	-	-	0.30µH	0.30µH
5043	0.19µH	0.19µH	0.19µH	0.70µH	0.70µH
6014	-	-	-	BA682	BA682
6019	-	-	-	LL4148	LL4148
6020	-	-	-	LL4148	LL4148
6042	-	-	-	BA682	BA682

SYSTEM 1: PAL BG  
SYSTEM 2: PAL I  
SYSTEM 3: PAL BG: SECAM BGDK  
SYSTEM 4: PAL BG: SECAM BGLL  
SYSTEM 5: PAL BG: SECAM BGLL

1001	D1
1015	D8
1032	F1
1033	G13
2001	C3
2005	F4
2006	C4
2007	C7
2010	D6
2012	E6
2013	F10
2014	G7
2015	C11
2016	C8
2017	F8
2018	F10
2019	G10
2020	G10
2022	G10
2025	F11
2026	G11
2027	E16
2028	F10
2037	D15
2038	C15
2041	B13
2043	A13
2044	B15
2045	B15
2852	K3
2855	K2
2860	I2
2875	K10
3001	C3
3002	G2
3003	F2
3010	D6
3011	F6
3012	G6
3015	B11
3018	F3
3019	E8
3020	G8
3021	G9
3022	G8
3023	G9
3024	G16
3025	G16
3026	E15
3027	E16
3028	F16
3029	F16
3030	F12
3031	G12
3032	G12
3033	G13
3034	F14
3035	F14
3038	F14
3039	F15
3043	A13
3044	B15
3045	B13
3046	K2
3851	I4
3852	K5
3853	I6
3855	I7
3858	I6
3859	I6
3862	I8
3865	I9
3866	I9
3871	J10
3872	J10
3876	K10
3879	L6
3881	I7
5010	E5
5012	F12
5022	C3
5032	G3
5040	B12
5043	B14
6014	G7
6015	G7
6020	F8
6034	F14
6042	A14
6849	H4
6850	I4
6851	I4
6852	I5
6853	I5
6854	I7
6855	I7
6856	I5
6857	I6
7002	F1
7015	C9
7027	E16
7030	G12
7031	G12
7875	K1
7876	L5

L

1

2

ESV.00345  
T-26 045



Video

Sound

Ton

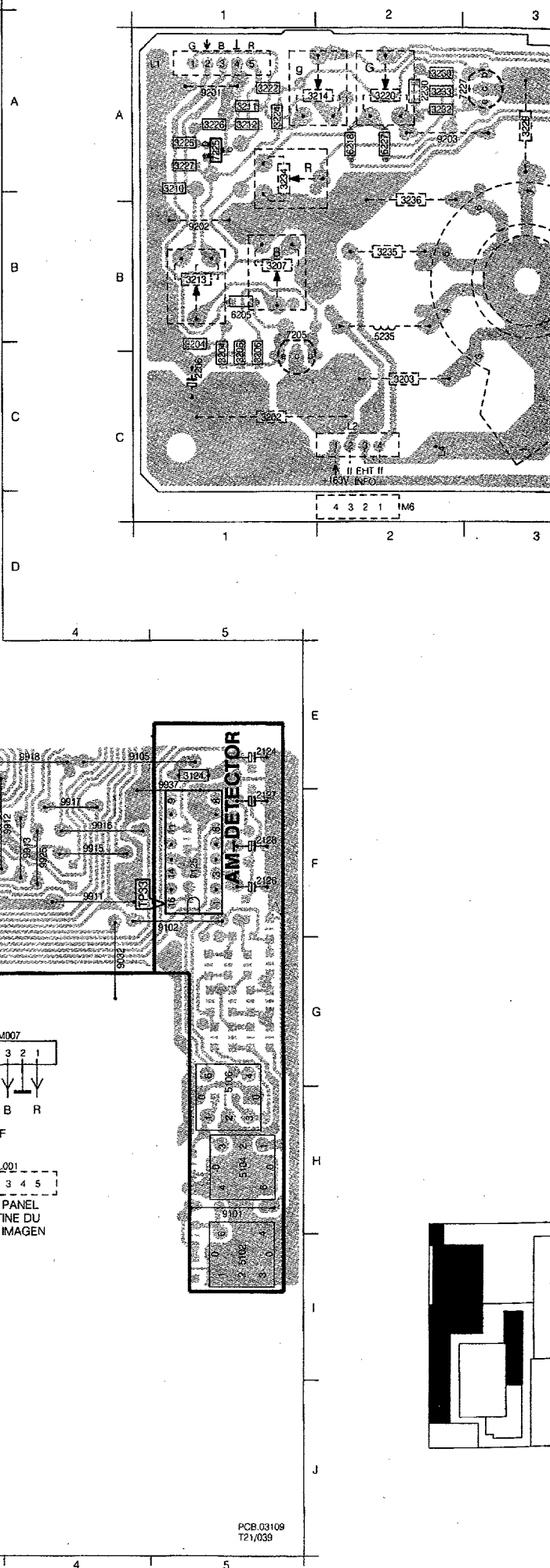
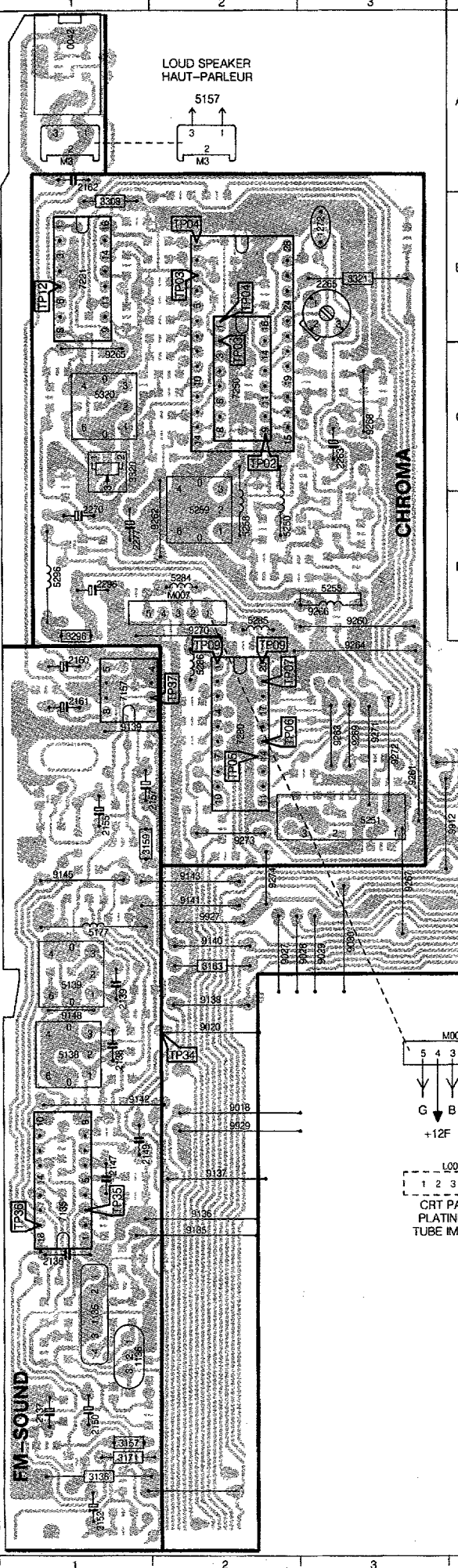
Son

CRT panel

ANUBIS A

6.13

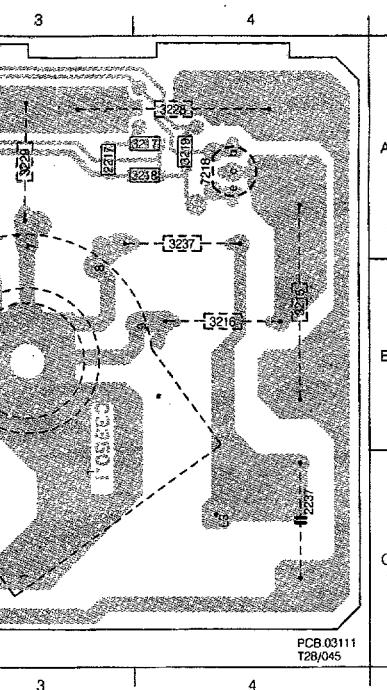
M3 A1  
0042 A1  
1135 I1  
1136 I1  
1272 B3  
2124 E5  
2126 F5  
2127 F5  
2128 F5  
2136 I1  
2137 J1  
2138 G1  
2139 G1  
2147 H1  
2149 H1  
2150 J1  
2152 J1  
2155 F1  
2157 F2  
2160 F1  
2181 E1  
2162 A1  
2263 C3  
2265 B3  
2270 D1  
2277 D1  
2296 D1  
3124 E5  
3136 J1  
3157 J1  
3159 F1  
3163 G2  
3171 J1  
3296 D1  
3308 B1  
3320 C1  
3321 B3  
5102 I5  
5104 H5  
5108 H5  
5138 G1  
5139 G1  
5177 F1  
5250 D2  
5251 F3  
5255 D3  
5258 D2  
5259 D2  
5284 D2  
5285 D2  
5286 E2  
5296 D1  
5320 C1  
5352 E4  
7125 F5  
7135 H1  
7157 E1  
7221 B1  
7250 C2  
7280 E2  
9018 H2  
9020 G2  
9027 G2  
9028 G3  
9029 G3  
9030 G3  
9032 G4  
9101 H5  
9102 F5  
9105 E4  
9135 H2  
9136 H2  
9137 H2  
9138 G2  
9139 E1  
9140 G2  
9141 F2  
9142 H1  
9143 F2  
9145 F1  
9148 G1  
9260 D3  
9261 E3  
9262 D2  
9263 E3  
9264 E3  
9265 C1  
9266 D3  
9267 F3  
9268 C3  
9269 E3  
9270 D2  
9271 E3  
9272 E3  
9273 F2  
9274 F2  
9911 F4  
9912 F4  
9913 F4  
9915 F4  
9916 F4  
9917 F4  
9918 E4  
9925 F4  
9927 F2  
9929 H2  
9937 E5  
M007 D2



PCB.03109  
T21/039

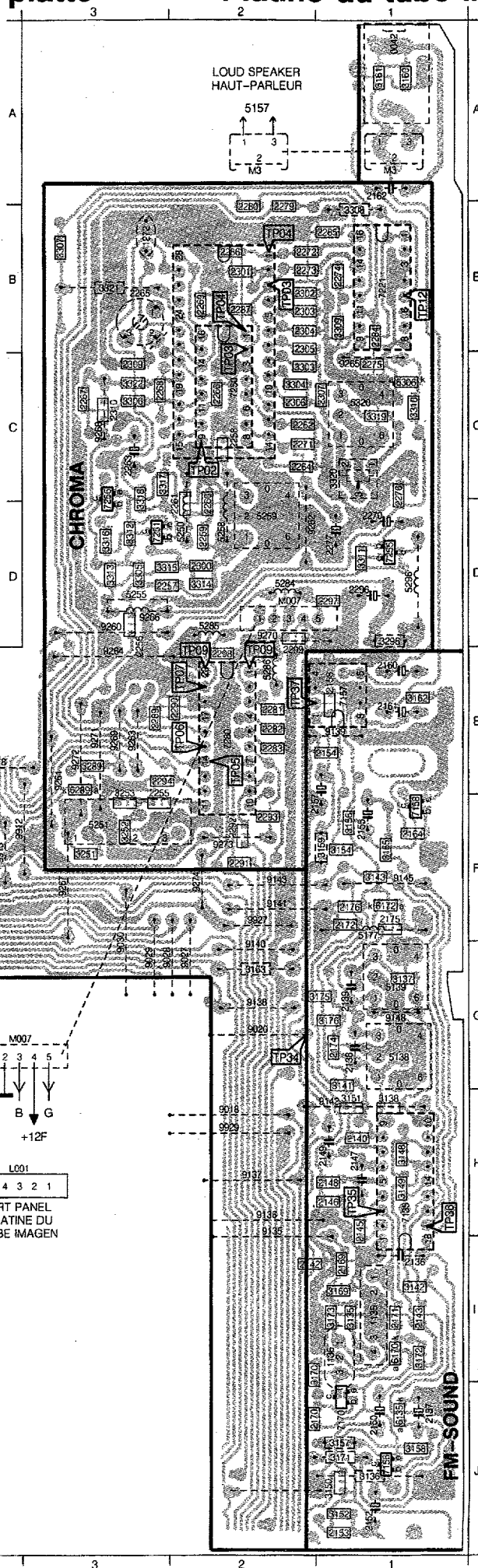
## Bildröhren platte

## Platine du tube image



1 C3	7218 A4
L1 A1	7225 A1
L2 C2	7227 A3
L3 C4	9201 A1
L4 C2	9202 B1
	9203 A2
2204 B1	
2206 C1	
2217 A3	
2230 A2	
2237 C4	
3202 C1	
3203 C2	
3204 C1	
3205 C1	
3206 C1	
3207 B1	
3210 A1	
3211 A1	
3212 A1	
3213 B1	
3214 A1	
3215 B4	
3216 B4	
3217 A3	
3218 A3	
3219 A4	
3220 A2	
3222 A1	
3224 A1	
3225 A1	
3227 A1	
3228 A4	
3229 A3	
3230 A2	
3232 A2	
3233 A2	
3234 A1	
3235 B2	
3236 B2	
3237 A4	
5235 B2	
6205 B1	
6218 A2	
6227 A2	
7205 B1	

PCB.03111  
T28/045



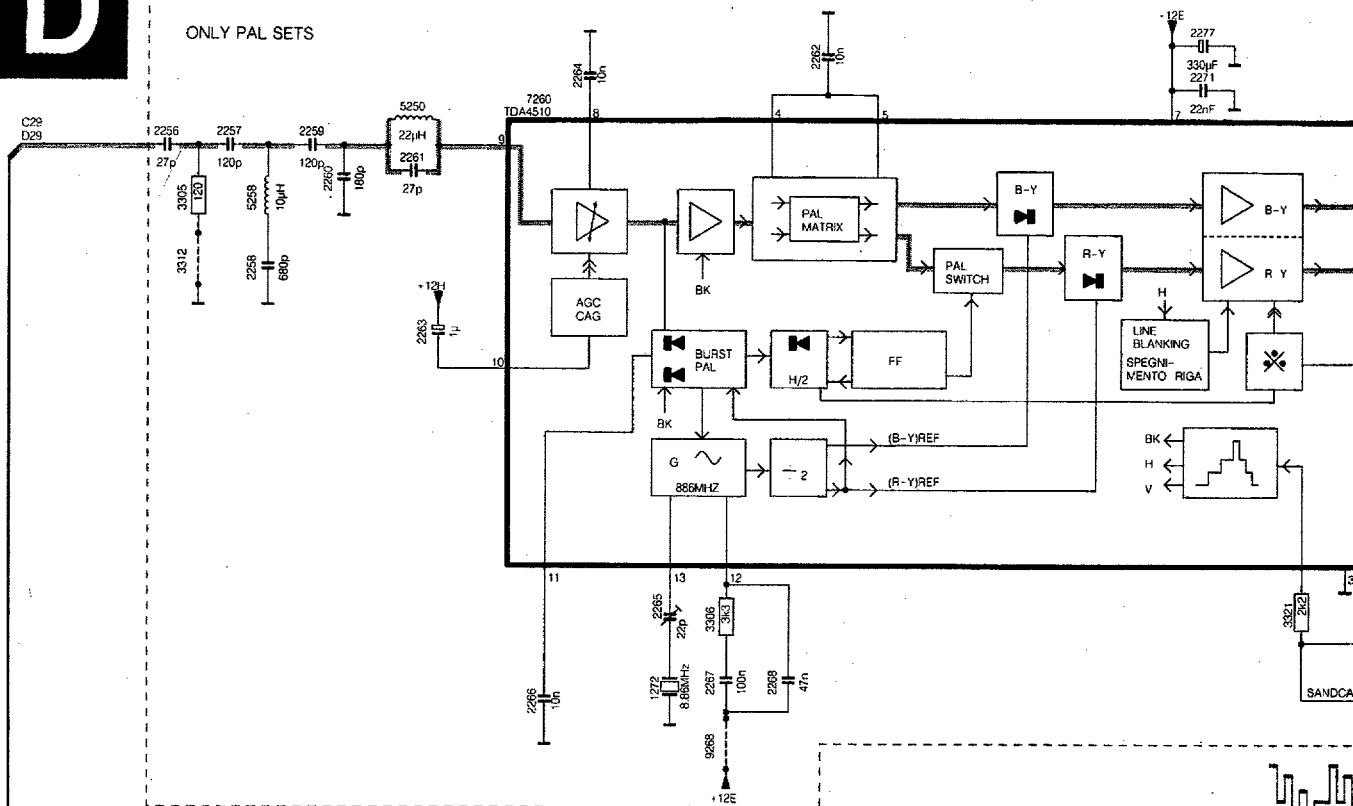
M3 A1	3304 C2
0042 A1	3305 D3
1135 I1	3306 C3
1136 I1	3307 B3
1272 B3	3308 B1
2101 I5	3309 B1
2102 I5	3310 C1
2104 H5	3311 O1
2110 H5	3312 O3
2115 G5	3313 D3
2117 G5	3314 D2
2118 G5	3315 D2
2120 G5	3316 D3
2124 E5	3317 C3
2125 F5	3318 O3
2126 F5	3319 C1
2127 F5	3320 C1
2128 F5	3321 B3
2136 I1	3322 C3
2137 I1	3323 F4
2138 G1	3324 I5
2139 G1	5104 H5
2140 H1	5106 H5
2142 I1	5138 G1
2143 I1	5139 G1
2145 I1	5177 F1
2146 H1	5250 D2
2147 H1	5251 D3
2148 H1	5255 D3
2149 H1	5258 D2
2150 J1	5259 D2
2152 J1	5284 D2
2153 J1	5285 D2
2154 E1	5286 E2
2155 F1	5286 F1
2157 F2	5320 C1
2158 E1	5652 E4
2160 E1	6115 G5
2161 E1	6116 G5
2162 A1	6119 G5
2164 F1	6120 G5
2169 I1	6135 J1
2170 J2	6170 I1
2171 I1	6172 F1
2172 F1	6289 E3
2174 G1	6306 C1
2175 F1	7125 F5
2176 F1	7135 H1
2255 F2	7156 J1
2256 E3	7157 E1
2257 D2	7158 F1
2258 C2	7170 J1
2259 D2	7221 B1
2260 D2	7250 C2
2261 D2	7251 D3
2262 C2	7255 D1
2263 C3	7256 D3
2264 C2	7280 E2
2265 B3	9018 H2
2266 C2	9020 G2
2267 C3	9027 G2
2268 C3	9028 G3
2269 B2	9029 G3
2270 D1	9030 G3
2271 C2	9032 G4
2272 B1	9101 H5
2273 B1	9102 F5
2274 B1	9105 E4
2275 C1	9135 H2
2276 D1	9136 H2
2277 D1	9137 H2
2279 B2	9138 G2
2280 B2	9139 E1
2281 E2	9140 G2
2282 E2	9141 F2
2283 E2	9142 H1
2284 B1	9143 F2
2285 B1	9145 F1
2286 B2	9148 G1
2287 B2	9260 D3
2288 E3	9261 E3
2290 E2	9262 D2
2291 F2	9263 E3
2292 F2	9264 E3
2293 F2	9265 C1
2294 E2	9266 D3
2296 D1	9267 F3
2297 D1	9268 C3
2298 E2	9269 E3
2299 E2	9270 D2
2300 D2	9271 E3
2301 B2	9272 E3
2302 B1	9273 F2
2303 B1	9274 F2
2304 B1	9311 F4
2305 B1	9312 F4
2306 C2	9313 F4
2307 C1	9315 F4
2309 C3	9316 F4
2310 C3	9317 F4
3101 F5	9318 E4
3102 F5	9319 F4
3103 G5	9327 F2
3116 G5	9329 H2
3117 G5	9337 E5
3118 G5	M007 D2
3119 G5	
3120 G5	
3124 E5	
3127 G5	
3135 I1	
3136 J1	
3137 G1	
3138 H1	
3141 G1	
3142 I1	
3143 F1	
3148 H1	
3149 H1	
3150 J1	
3151 H1	
3152 J1	
3154 F1	
3155 F1	
3156 F1	
3157 J1	
3158 J1	
3159 F1	
3160 A1	
3161 A1	
3162 E1	
3163 G2	
3169 I1	
3170 J2	
3171 J1	
3172 I1	
3173 I1	
3175 G1	
3176 G1	
3251 F3	
3252 F3	
3253 F3	
3259 D3	
3296 D1	
3303 C1	

PCB.03110  
T28/045

## D

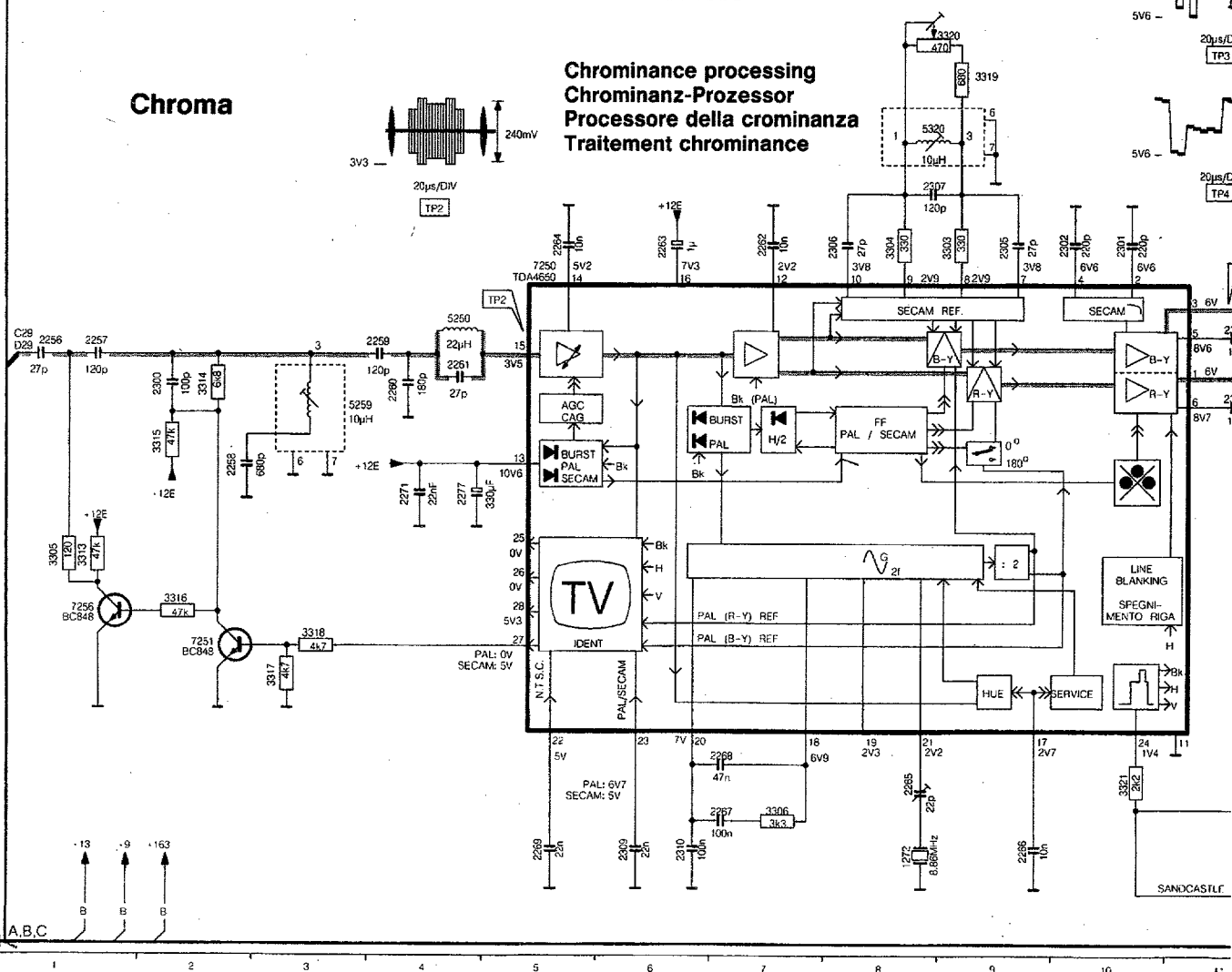
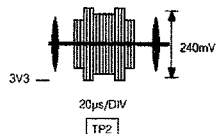
DIAGRAM D

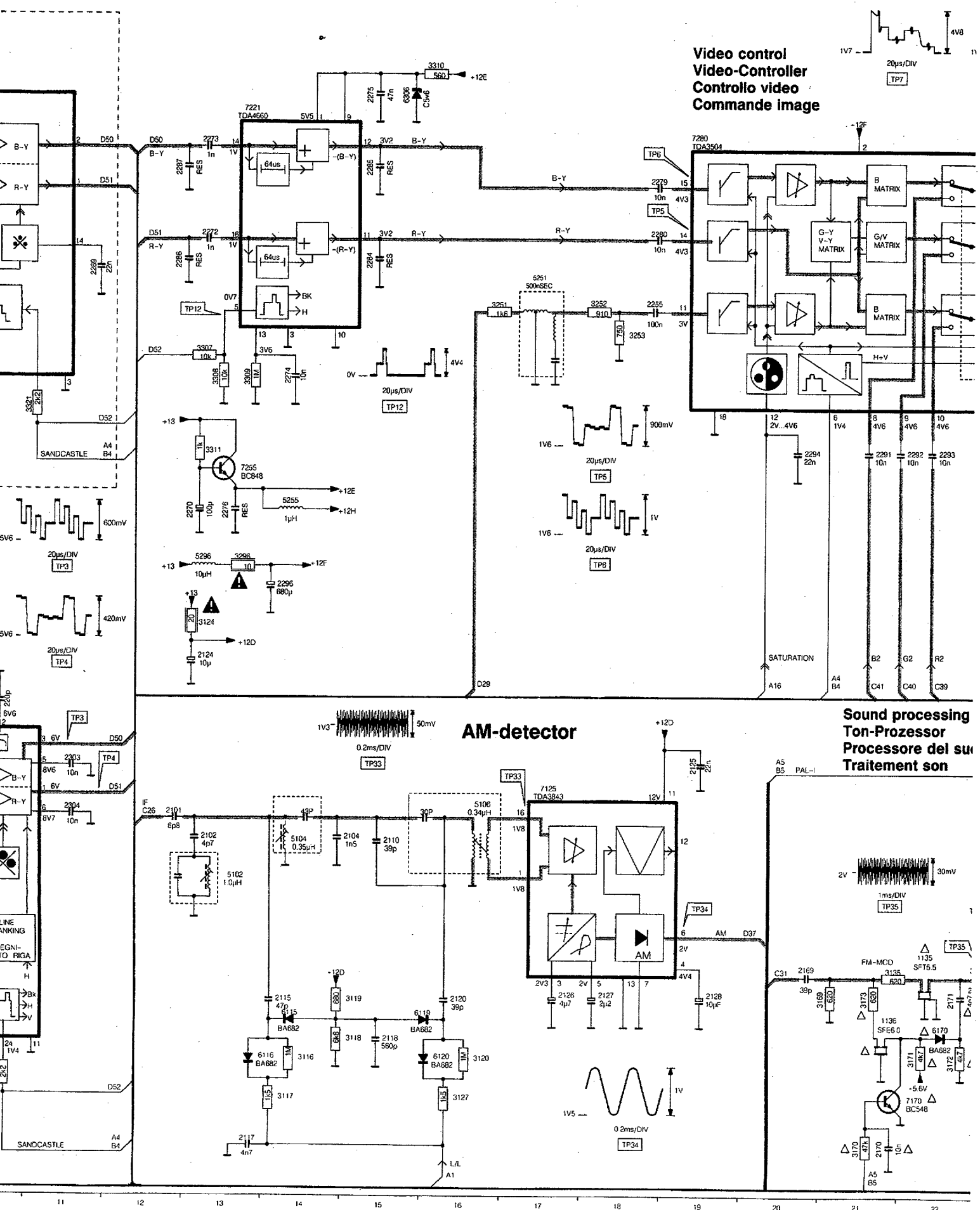
ONLY PAL SETS



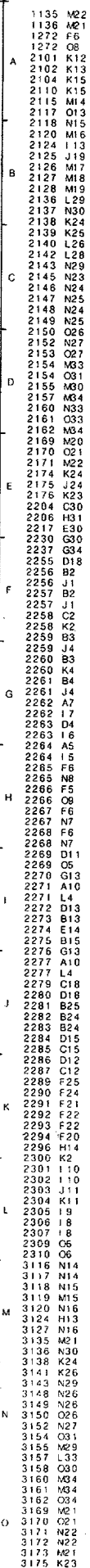
Chroma

Chrominance processing  
Chrominanz-Prozessor  
Processore della crominanza  
Traitement chrominance









## 1. Adjustments on the main panel (Fig. 7)

### 1.1 +100V power supply voltage

Connect a voltmeter (DC) between pin 6 of connector M5 and ground. Adjust potentiometer 3535 for a voltage of +100V.

### 1.2 Horizontal synchronization

Interconnect pins 8 and 28 of IC7015. Apply an aerial signal and tune the set. Adjust potentiometer 3356 until the picture is straight. Remove the interconnection.

### 1.3 Horizontal centring

Is adjusted with potentiometer 3354.

### 1.4 Vertical centring

Can be adjusted by eventually mounting one of the resistors 3401 or 3408.

### 1.5 Picture height

Is adjusted with potentiometer 3410.

### 1.6 Focussing

Is adjusted with the focussing potentiometer in the line output transformer (see Fig. 8).

### 1.7 IF filter for PAL/SECAM BGLL'- or PAL/SECAM BGLL'I sets

Connect a signal generator (e.g. PM 5326) via a condenser 5p6 to pin 17 of the tuner and adjust the frequency for 33.4 MHz. Connect an oscilloscope to pin 1 of filter 1015. Switch on the set and select system Europe via the system button on the set. Adjust 5012 for a minimum amplitude.

### 1.8 AFC

#### a. Alignments for PAL/SECAM BGLL'- or PAL/SECAM BGLL'I sets

Connect a signal generator (e.g. PM 5326) as indicated in point 1.7 and adjust the frequency for 33.4 MHz. Tune the set in the VHF1 band at a tuning voltage of approx. 5V on pin 11 of the tuner. Select system France via the system button on the set. Connect a voltmeter to pin 21 of IC7015. Adjust 5040 for 6V (DC). Next adjust the frequency of the signal generator for 38.9 MHz. Select system Europe on the set. Adjust 5043 for 6V (DC).

#### b. Alignment for PAL BG-, PAL/SECAM BG-, PAL/SECAM BGDK- or PAL I sets

Connect a signal generator (e.g. PM 5326) as indicated in point 1.7 and adjust the frequency for 38.9 MHz (PAL I: 39.5MHz). Connect a voltmeter to pin 21 of IC7015. Adjust 5040 for 6V (DC).

### 1.9 RF AGC

If the picture of a strong local transmitter is reproduced distorted, adjust potentiometer 3021 until the picture is undistorted.

### 1.10 Chroma band-pass filter for PAL/SECAM sets

Connect a signal generator (e.g. PM5326) to pin 20 of the euro connector and adjust it for a frequency of 4,286 MHz. Connect pin 8 of the euro connector and pin 27 of IC7250 to pin 13 of IC7250 (+12V). Connect an oscilloscope to pin 15 of IC7250. Adjust 5259 for a maximum amplitude. Remove the interconnections.

### 1.11 Chroma subcarrier oscillator

Apply a PAL colour-bar pattern. Interconnect pin 11 of IC7260 (TDA4510) or pin 17 of IC7250 (TDA4650) to ground. Adjust 2265 so that colour pattern on the screen is practically stationary. Remove the interconnection.

### 1.12 SECAM demodulators for PAL/SECAM sets

Apply a SECAM black pattern. Connect an oscilloscope to pin 1 of IC7250. Adjust 5320 for 0 reading. Connect the oscilloscope to pin 3 of IC7250. Adjust 3320 for 0 reading.

### 1.13 The FM sound section

#### a. General adjustments

Apply a PAL BG (PAL I for PAL I sets) generator signal whose sound carrier is (FM) modulated with a frequency of 1 kHz. Set the generator to the mono mode. Tune the set and select, if possible, system Europe. Adjust 5138 for maximum sound output.

#### b. Additional adjustment for PAL/SECAM BGDK sets

After the general adjustment (see point a.) put the generator in SECAM DK position. Adjust 5139 for maximum sound output.

### 1.14 The AM sound section for PAL/SECAM BGLL'- or PAL/SECAM BGLL'I sets

Connect pin 3 of IC7125 to a fixed voltage level of +2V by means of a adjustable power supply. Connect a signal generator (e.g. PM 5326) via a condenser 5p6 to pin 17 of the tuner and adjust the frequency for 32,4 MHz. Modulate (AM) the signal with 1 kHz. Tune the set in the UHF band and select system France. First adjust 5106 for maximum sound output. Next adjust 5104 for maximum sound output. Adjust the frequency of the signal generator for 30,9 MHz. and modulate (AM) the signal with 1 kHz. Adjust 5102 for minimum sound output. Remove the power supply connection.

## 2. Adjustments on the picture tube panel (Fig. 9)

### 2.1 Cut-off points of picture tube

Apply a black pattern generator signal. Adjust contrast at minimum.

Adjust brightness until the DC voltage across potentiometer 3213 is 0V.

Adjust 3207, 3220 and 3234 for a black level of 125V on the collectors of transistors 7205, 7218 and 7227.

Adjust Vg2 potentiometer until the gun that first emits light is just no longer visible. Adjust the two other guns with the respective controls (3207, 3220 or 3234) until just no light will be visible.

### 2.2 Grey scale

Apply a test pattern signal and adjust the set for normal operation. Allow the set to warm up for about 10 minutes. Adjust 3213 and 3214 until the desired grey scale has been obtained.

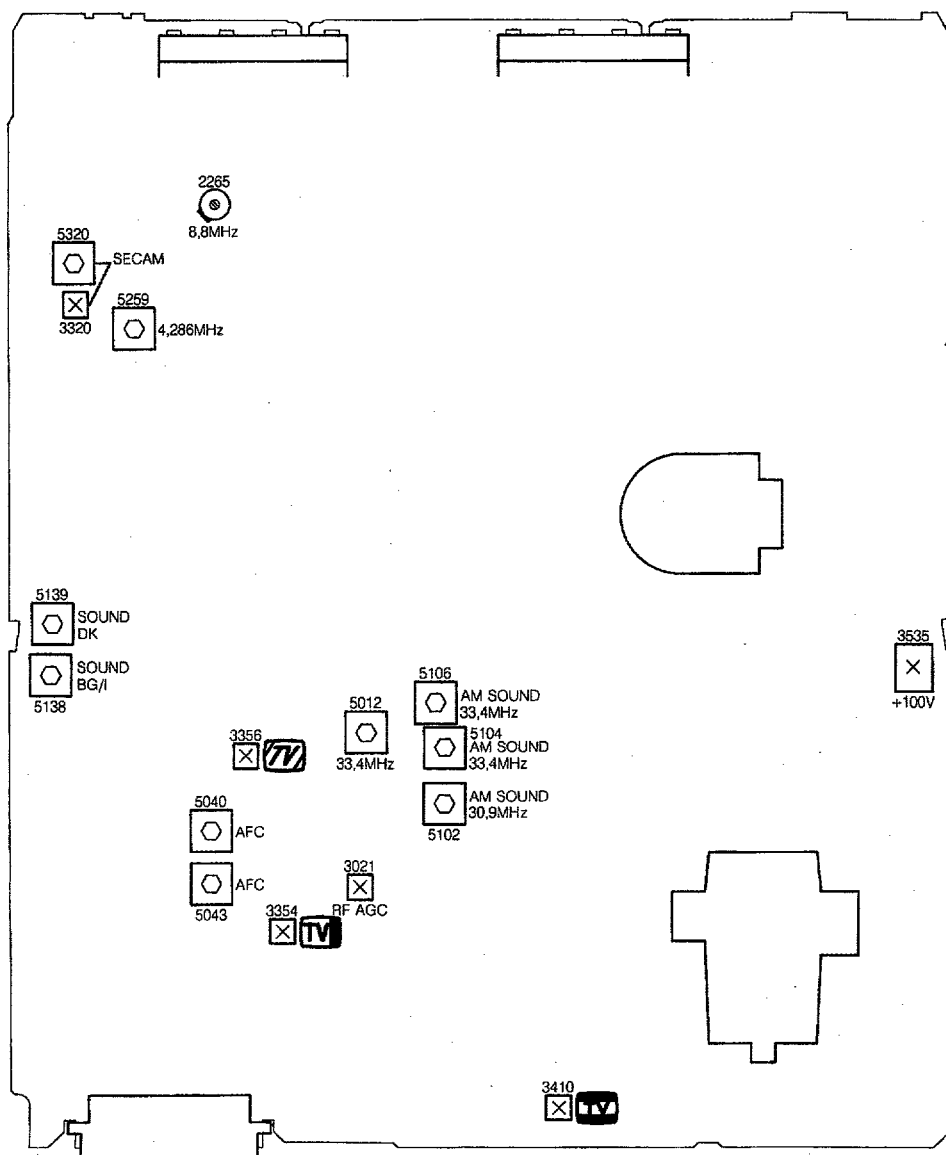


Fig. 7

MDA.02811  
T10/037

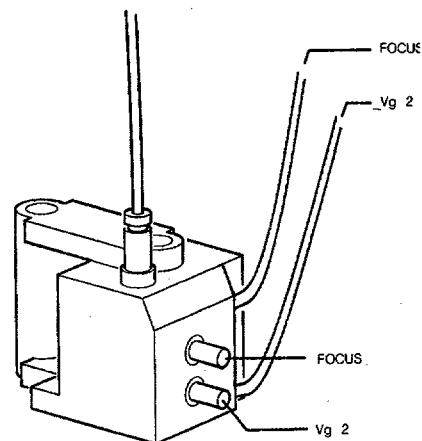


Fig. 8

MDA.00633  
CP90  
T28/723

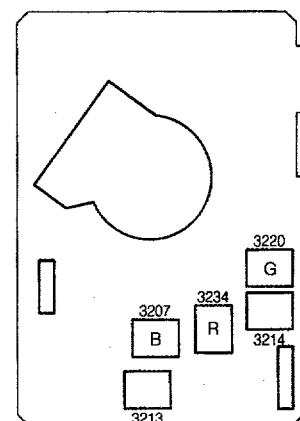


Fig. 9

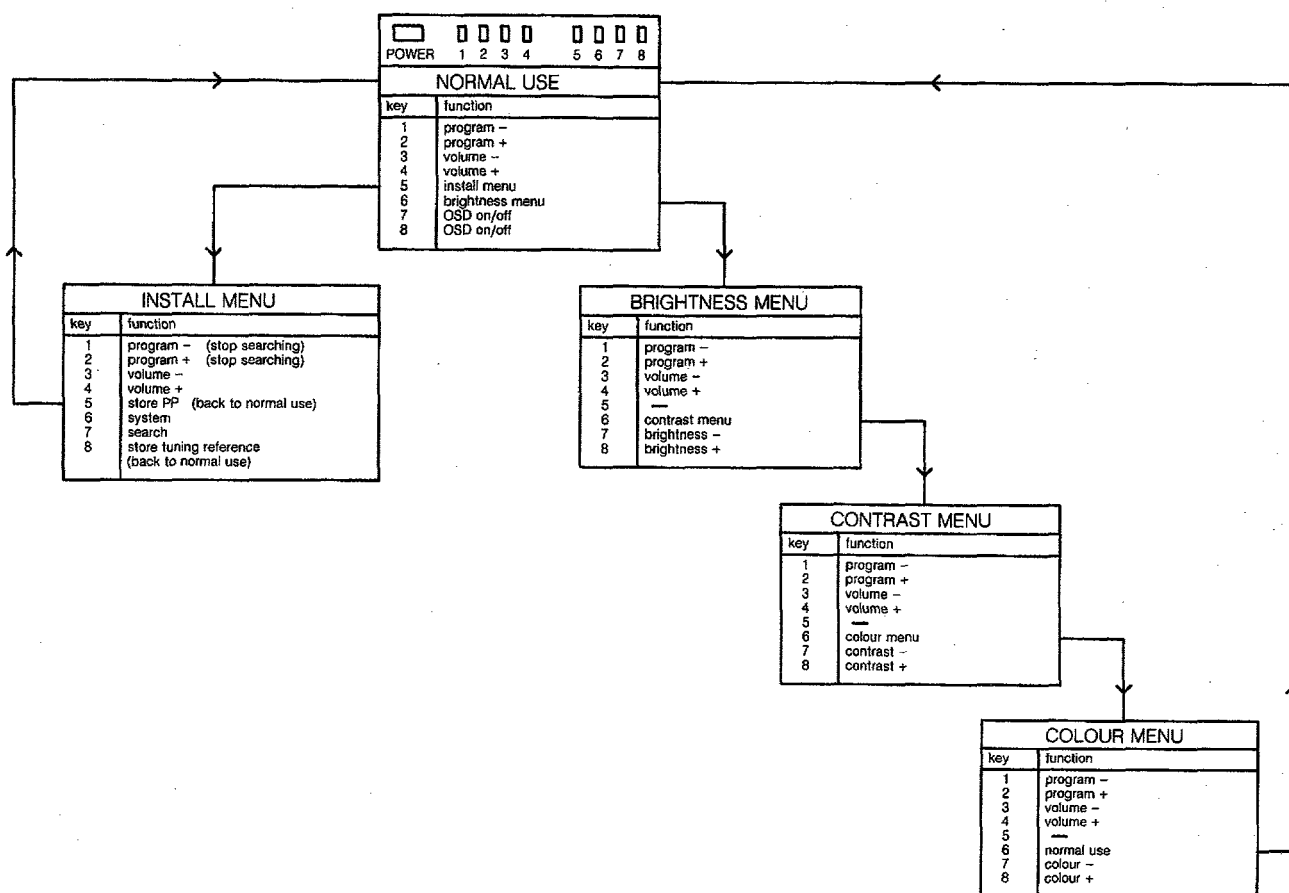
MDA.02812  
T28/036



## Quick diagnose reference

ERROR MESSAGE	ERROR DESCRIPTION	POSSIBLE DEFECTIVE COMPONENT
Flashing LED	Internal $\mu$ C error	IC7600
F4 on the screen	EEPROM error	IC7685

## 1. Local keyboard operation



MDA.02858  
T-26/044

- \* **Switching on the hotel mode**  
Select program number 38.  
Hold key 5 depressed while pressing key 1.  
Now the volume control is limited to a pre-set maximum and the installation menu can no longer be displayed.

- \* **Switching off the hotel mode**  
Select program number 38.  
Hold key 5 depressed while pressing key 7.  
Now the set can be operated normally again.

## 2. Connections via the EURO connector





### 2.1 CVBS sources

If a CVBS source (e.g. a video recorder) is connected to the EURO connector, this source should generate a CVBS status signal at pin 8 of the EURO connector.

### 2.2 RGB sources

If an RGB source (e.g. a laser disc player) is connected to the EURO connector, this source should generate both a CVBS status signal at pin 8 and an RGB signal at pin 16 of the EURO connector.

## Mono carrier

								
4822 267 60243	EURO CONN.		2127 4822 124 41576	2,2µF 20% 50V		2310 4822 122 32893	100nF 80% 50V	
4822 267 31292	JACK 3.5mm		2128 4822 124 40435	10µF 20% 50V		2350 4822 122 32891	68nF 10% 63V	
4822 265 30389	2P FOR M1		2136 4822 121 43808	22nF 10% 100V		2351 4822 124 40435	10µF 20% 50V	
4822 265 40596	2P FOR M2		2137 4822 124 40193	68µF 20% 16V		2352 4822 122 31808	150pF 10% 50V	
4822 267 40666	3P FOR M3		2138 4822 121 51231	820pF 1% 400V		2353 4822 121 41854	150nF 5% 63V	
4822 264 40207	3P FOR M4		2138 4822 121 43066	1nF 2% 400V		2354 5322 121 42661	330nF 5% 63V	
4822 265 40421	6P FOR M5		2139 4822 121 51231	820pF 1% 400V		2355 4822 121 42937	2,7nF 1% 250V	
<b>Various</b>			2140 4822 122 32863	22nF 80% 50V		2356 4822 122 32863	22nF 80% 50V	
4822 276 12597	SWITCH SK1		2142 4822 122 32863	22nF 80% 50V		2359 5322 122 31842	330pF 5% 63V	
4822 466 82782	SHIELD FOR 7600		2143 4822 122 32863	22nF 80% 50V		2364 4822 121 42408	220nF 5% 63V	
4822 277 21438	SWITCH 0025		2145 4822 122 32863	22nF 80% 50V		2366 4822 122 32597	6,8nF 10% 63V	
4822 276 40414	SWITCH 0024		2146 4822 122 32863	22nF 80% 50V		2370 4822 124 40767	33µF 100 V	
4822 256 30274	FUSE HOLDER		2147 5322 121 42491	47nF 5% 100V		2371 4822 122 32863	22nF 80% 50V	
4822 255 40955	LED HOLDER		2148 4822 122 32856	8,2nF 10% 63V		2401 4822 122 31771	390pF 5% 50V	
4822 492 70559	SPRING 7525		2149 5322 121 42491	47nF 5% 100V		2402 4822 122 32542	47nF 10% 63V	
4822 492 70559	SPRING 7445		2150 4822 124 41576	2,2µF 20% 50V		2404 4822 124 40432	1500µF 20% 25V	
1001 4822 210 10405	UV917E		2152 4822 124 40242	1µF 20% 63V		2405 4822 124 41678	22µF 20% 25V	
1001 4822 210 10421	U743/IEC		2153 4822 122 31784	4,7nF 10% 50V		2414 4822 122 31644	2,2nF 10% 63V	
1015 4822 242 72212	OFWG3950		2154 4822 122 31784	4,7nF 10% 50V		2415 4822 124 41678	22µF 20% 25V	
1015 4822 242 70936	OFWJ1952		2155 4822 124 40242	1µF 20% 63V		2416 4822 122 32542	47nF 10% 63V	
1015 4822 242 72374	OFWG1961		2157 4822 124 41525	100µF 20% 25V		2417 4822 124 41859	330µF 20% 35V	
1032 4822 242 72211	TPS 5,5MW		2158 4822 122 32863	22nF 80% 50V		2440 5322 122 31842	330pF 5% 63V	
1033 4822 153 30025	6,0MHz		2160 4822 124 41525	100µF 20% 25V		2442 4822 122 40112	560pF 20% 500V	
1033 4822 242 71375	TP6,5MB		2161 4822 124 41525	100µF 20% 25V		2443 4822 124 40196	220µF 20% 16V	
1135 4822 242 70714	SFT5,5MBF		2162 4822 122 33401	10nF 80% 63V		2444 4822 121 43139	180nF 10% 100V	
1135 4822 242 71841	SFT6,0MA		2169 4822 122 31972	39pF 5% 50V		2445 4822 122 33467	1,5nF 10% R 2kV	
1136 4822 242 71713	SFE6,0MBF		2170 4822 122 32862	10nF 80% 50V		2446 5322 121 42523	8,2nF 5% 2kV	
1136 4822 242 72057	SFE6,5MB		2171 4822 122 31784	4,7nF 10% 50V		2447 4822 121 42004	10nF 10% 400V	
1272 4822 242 70304	8,867 238 MHz		2172 4822 122 32893	100nF 80% 50V		2448 4822 124 41056	47µF 50% 200V	
1500 4822 070 32002	218002,(2A)		2174 4822 122 31768	180pF 5% 50V		2450 4822 121 42442	560nF 5% 200V	
1540 4822 253 10064	19372(0,4A)		2175 4822 122 31781	1500pF 10% 50V		2451 5322 124 40641	10µF 20% 100V	
1679 4822 242 70831	CSA4,00MG		2176 4822 122 32862	10nF 80% 50V		2452 4822 124 41677	680µF 20% 25V	
1685 4822 218 20981	LTM8848A-1		2255 4822 122 32893	100nF 80% 50V		2453 4822 124 41859	330µF 20% 35V	
			2256 4822 122 31825	27pF 10% 50V		2460 4822 121 51385	33nF 20% 100V	
2001 4822 124 40198	470µF 20% 16V		2257 4822 122 31766	120pF 5% 50V		2465 4822 122 31839	82pF 10% 50V	
2005 4822 121 51252	470nF 5% 63V		2258 4822 122 31775	680pF 5% 50V		2470 4822 124 42103	22µF 20% 200V	
2006 4822 122 32863	22nF 80% 50V		2259 4822 122 31766	120pF 5% 50V		2500 4822 124 41531	470nF 10% 250V	
2007 4822 124 40242	1µF 20% 63V		2260 4822 122 31768	180pF 5% 50V		2502 4822 126 11141	2,2nF 10% 1kV	
2010 4822 122 31769	18pF 5% 50V		2261 4822 122 31825	27pF 10% 50V		2504 4822 126 11141	2,2nF 10% 1kV	
2011 4822 122 31769	18pF 5% 50V		2262 4822 122 32862	10nF 80% 50V		2505 4822 124 42104	68µF 20% 385V	
2013 4822 122 31769	18pF 5% 50V		2263 4822 124 40242	1µF 20% 63V		2506 4822 126 11137	3,3nF 20% 400V	
2014 4822 122 31784	4,7nF 10% 50V		2264 4822 122 32862	10nF 80% 50V		2507 5322 121 41977	47nF 5% 250V	
2015 4822 124 40199	680µF 20% 16V		2265 4822 125 50045	20pF		2511 4822 122 31808	150pF 10% 50V	
2016 4822 122 32893	100nF 80% 50V		2266 4822 122 32862	10nF 80% 50V		2514 4822 122 31961	68pF 5% 63V	
2017 4822 124 40195	150µF 20% 16V		2267 4822 122 32893	100nF 80% 50V		2515 4822 122 31961	68pF 5% 63V	
2017 4822 124 41643	100µF 20% 16V		2268 5322 122 31641	47nF 50V		2517 5322 121 42498	680nF 5% 63V	
2018 4822 122 31916	5,6nF 10% 63V		2269 4822 122 32863	22nF 80% 50V		2520 4822 122 32891	68nF 10% 63V	
2019 4822 122 32891	68nF 10% 63V		2270 4822 124 41525	100µF 20% 25V		2522 4822 122 31746	1000pF 5% 50V	
2020 4822 124 41576	2,2µF 20% 50V		2271 4822 122 32863	22nF 80% 50V		2523 4822 122 31746	1000pF 5% 50V	
2025 4822 124 41578	6,8µF 20% 50V		2272 5322 122 31647	1nF 10% 63V		2524 4822 126 11208	680pF 10% 1kV	
2026 4822 122 32863	22nF 80% 50V		2273 5322 122 31647	1nF 10% 63V		2525 4822 126 11207	220pF 10% 1kV	
2027 4822 122 32863	22nF 80% 50V		2274 4822 122 32862	10nF 80% 50V		2530 4822 124 41056	47µF 50% 200V	
2030 4822 122 32863	22nF 80% 50V		2275 5322 122 31641	47nF 50V		2532 4822 122 32585	470pF 10% 500V	
2038 4822 122 32863	22nF 80% 50V		2277 4822 124 40849	330µF 20% 16V		2534 4822 126 11209	1,5nF 10% 1kV	
2041 4822 122 31784	4,7nF 10% 50V		2279 4822 122 32862	10nF 80% 50V		2540 4822 124 41677	680µF 20% 25V	
2043 4822 122 31784	4,7nF 10% 50V		2280 4822 122 32862	10nF 80% 50V		2545 4822 124 41577	4,7µF 20% 50V	
2044 4822 122 31784	4,7nF 10% 50V		2281 4822 122 32863	22nF 80% 50V		2547 4822 122 31746	1000pF 5% 50V	
2101 4822 122 32507	6,8pF 5% 50V		2282 4822 122 32863	22nF 80% 50V		2550 4822 121 42786	33 nF 2% 100V	
2102 4822 122 32082	4,7pF 5% 50V		2283 4822 122 32863	22nF 80% 50V		2553 4822 122 31727	22pF 5% 63V	
2104 4822 122 31781	1500pF 10% 50V		2289 4822 122 32863	22nF 80% 50V		2554 4822 122 31174	2,7nF 10% 500V	
2110 4822 122 31972	39pF 5% 50V		2290 4822 122 32863	22nF 80% 50V		2555 4822 122 32863	22nF 80% 50V	
2115 4822 126 11206	430pF 5% 50V		2291 4822 122 32862	10nF 80% 50V		2556 4822 122 31784	4,7nF 10% 50V	
2117 4822 122 31784	4,7nF 10% 50V		2292 4822 122 32862	10nF 80% 50V		2560 4822 124 41677	680µF 20% 25V	
2118 4822 122 32765	820pF 10% 63V		2293 4822 122 32862	10nF 80% 50V		2561 4822 124 41678	22µF 20% 25V	
2120 4822 126 11206	430pF 5% 50V		2294 4822 122 32863	22nF 80% 50V		2562 4822 122 31727	470pF 5% 63V	
2124 4822 124 40435	10µF 20% 50V		2300 4822 122 31765	100pF 5% 50V		2563 4822 122 31727	470pF 5% 63V	
2125 4822 122 32863	22nF 80% 50V		2301 4822 122 31965	220pF 5% 63V		2573 4822 122 31772	47pF 5% 50V	
2126 4822 124 41577	4,7µF 20% 50V		2302 4822 122 31965	220pF 5% 63V		2602 4822 124 40435	10µF 20% 50V	
			2303 4822 122 32862	10nF 80% 50V		2606 4822 122 31974	820pF 10% 63V	
			2304 4822 122 32862	10nF 80% 50V		2610 4822 121 41673	220nF 10% 100V	
			2305 4822 122 31825	27pF 10% 50V		2611 4822 121 41673	220nF 10% 100V	
			2306 4822 122 31825	27pF 10% 50V		2615 4822 122 31765	100pF 5% 50V	
			2307 4822 122 31766	120pF 5% 50V		2623 4822 124 40242	1µF 20% 63V	
			2309 4822 122 32863	22nF 80% 50V				



2624	4822 124 41577	4,7μF 20% 50V
2625	4822 122 32765	820pF 10% 63V
2629	4822 124 40435	10μF 20% 50V
2630	4822 124 41576	2,2μF 20% 50V
2651	4822 122 31974	820pF 10% 63V
2658	4822 122 31974	820pF 10% 63V
2660	5322 122 31647	1nF 10% 63V
2666	4822 124 41525	100μF 20% 25V
2669	5322 122 31842	330pF 5% 63V
2676	4822 122 31768	180pF 5% 50V
2677	4822 122 31971	10pF 10% 50V
2678	4822 122 31971	10pF 10% 50V
2679	4822 122 31839	82pF 10% 50V
2680	4822 122 31825	27pF 10% 50V
2681	4822 122 31825	27pF 10% 50V
2682	4822 122 31765	100pF 5% 50V
2685	4822 124 41525	100μF 20% 25V
2686	4822 122 32863	22nF 80% 50V
2690	4822 122 32863	22nF 80% 50V
2695	4822 122 31974	820pF 10% 63V
2696	4822 122 31974	820pF 10% 63V
2697	4822 122 31974	820pF 10% 63V
2698	4822 122 31974	820pF 10% 63V
2850	4822 122 31727	470pF 5% 63V
2852	4822 122 31727	470pF 5% 63V
2860	4822 122 31784	4,7nF 10% 50V
2876	4822 124 40435	10μF 20% 50V







3001	4822 052 10229	22Ω 5% 0,33W
3002	4822 051 10272	2k70 2% 0,25W
3004	4822 051 10008	0Ω 5% 0,25W
3005	4822 051 10008	0Ω 5% 0,25W
3010	4822 051 10569	56Ω 2% 0,25W
3011	4822 051 10562	5k60 2% 0,25W
3012	4822 051 10562	5k60 2% 0,25W
3015	4822 052 10109	10Ω 5% 0,33W
3017	4822 116 52256	2k2 5% 0,5W
3018	4822 051 10103	10k0 2% 0,25W
3019	4822 051 10562	5k60 2% 0,25W
3020	4822 051 10829	82Ω 2% 0,25W
3021	4822 100 11392	47k LIN
3022	4822 051 10472	4k70 2% 0,25W
3023	4822 051 10394	390k0 2% 0,25W
3024	4822 051 10472	4k70 2% 0,25W
3025	4822 051 10472	4k70 2% 0,25W
3026	4822 051 10101	100Ω 2% 0,25W
3027	4822 051 10221	220Ω 2% 0,25W
3028	4822 051 10152	1k50 2% 0,25W
3029	4822 051 10152	1k50 2% 0,25W
3030	4822 051 10221	220Ω 2% 0,25W
3031	4822 051 10331	330Ω 2% 0,25W
3032	4822 051 10181	180Ω 2% 0,25W
3033	4822 051 10182	1k80 2% 0,25W
3034	4822 051 10103	10k0 2% 0,25W
3035	4822 051 10008	0Ω 5% 0,25W
3036	4822 051 10008	0Ω 5% 0,25W
3037	4822 051 10008	0Ω 5% 0,25W
3038	4822 051 10393	390k 2% 0,25W
3039	4822 051 10393	39k0 2% 0,25W
3043	4822 051 10103	10k0 2% 0,25W
3044	4822 116 52233	10k 5% 0,5W
3049	4822 051 10683	68k0 2% 0,25W
3050	4822 051 10332	3k30 2% 0,25W
3051	4822 051 10223	22k0 2% 0,25W
3101	4822 051 10008	0Ω 5% 0,25W
3102	4822 051 10008	0Ω 5% 0,25W
3103	4822 051 10008	0Ω 5% 0,25W
3116	4822 051 10105	1M0 5% 0,25W
3117	4822 051 10152	1k50 2% 0,25W
3118	4822 051 10682	6k80 2% 0,25W
3119	4822 051 10681	680Ω 2% 0,25W
3120	4822 051 10105	1M0 5% 0,25W



3124	4822 052 10229	22Ω 5% 0,33W
3127	4822 051 10152	1k50 2% 0,25W
3135	4822 051 10621	620Ω 2% 0,25W
3136	4822 053 11181	180Ω 5% 2W
3137	4822 051 10008	0Ω 5% 0,25W
3138	4822 051 20222	2k20 5% 0,1W
3139	4822 051 10008	0Ω 5% 0,25W
3140	4822 051 10008	0Ω 5% 0,25W
3141	4822 051 10332	3k30 2% 0,25W
3142	4822 051 10008	0Ω 5% 0,25W
3143	4822 051 10102	1k0 2% 0,25W
3148	4822 051 10273	27k0 2% 0,25W
3149	4822 051 10273	27k0 2% 0,25W
3150	4822 051 10104	100k0 2% 0,25W
3151	4822 051 10008	0Ω 5% 0,25W
3152	4822 051 10562	5k60 2% 0,25W
3154	4822 051 10472	4k70 2% 0,25W
3155	4822 051 10103	10k0 2% 0,25W
3156	4822 051 10008	0Ω 5% 0,25W
3157	4822 050 21003	10k0 1% 0,6W
3158	4822 051 10122	1k20 2% 0,25W
3159	4822 052 11208	2Ω 5% 0,5W
3160	4822 051 10689	68Ω 2% 0,25W
3161	4822 051 10689	68Ω 2% 0,25W
3162	4822 051 10104	10k0 2% 0,25W
3163	4822 052 11208	2Ω 5% 0,5W
3169	4822 051 10621	620Ω 2% 0,25W
3170	4822 051 10473	47k0 2% 0,25W
3171	4822 116 52283	4k7 5% 0,5W
3172	4822 051 10472	4k70 2% 0,25W
3173	4822 051 10621	620Ω 2% 0,25W
3175	4822 051 10102	1k0 2% 0,25W
3251	4822 051 10162	1k60 2% 0,25W
3252	4822 051 10911	910Ω 2% 0,25W
3253	4822 051 10751	750Ω 2% 0,25W
3289	4822 051 10682	6k80 2% 0,25W
3296	4822 111 30508	10Ω 5% 0,33W
3303	4822 051 10331	330Ω 2% 0,25W
3304	4822 051 10331	330Ω 2% 0,25W
3305	4822 116 90536	120Ω 1% 0,125W
3306	4822 051 10332	3k30 2% 0,25W
3307	4822 051 10103	10k0 2% 0,25W
3308	4822 116 52233	10k 5% 0,5W
3309	4822 051 10105	1M0 5% 0,25W
3310	4822 051 10561	560Ω 2% 0,25W
3311	4822 051 10102	1k0 2% 0,25W
3313	4822 051 10473	47k0 2% 0,25W
3314	4822 051 10682	6k80 2% 0,25W
3315	4822 051 10473	47k0 2% 0,25W
3316	4822 051 10473	47k0 2% 0,25W
3317	4822 051 10472	4k70 2% 0,25W
3318	4822 051 10472	4k70 2% 0,25W
3319	4822 051 10681	680Ω 2% 0,25W
3320	4822 101 10927	470Ω
3321	4822 116 52256	2k2 5% 0,5W
3322	4822 051 10008	0Ω 5% 0,25W
3350	4822 051 10823	82k0 2% 0,25W
3351	4822 116 52249	1k8 5% 0,5W
3353	4822 051 10823	82k0 2% 0,25W
3354	4822 100 11163	100k LIN 0,1W
3355	4822 116 52264	27k 5% 0,5W
3356	4822 100 11141	10k TRIM
3357	4822 051 10152	1k50 2% 0,25W
3358	4822 051 10473	47k0 2% 0,25W
3359	4822 051 10272	2k70 2% 0,25W
3360	4822 051 10008	0Ω 5% 0,25W
3361	4822 051 10008	0Ω 5% 0,25W
3362	4822 051 10101	100Ω 2% 0,25W
3363	4822 051 10008	0Ω 5% 0,25W
3364	4822 051 10364	360k0 2% 0,25W
3365	4822 116 81682	2M2 5% 0,5W
3370	4822 052 11471	470Ω 5% 0,5W
3401	4822 116 52259	2k4 5% 0,5W



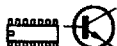
3402	4822 116 52222	390Ω 5% 0,5W
3403	4822 116 52269	3k3 5% 0,5W
3403	4822 116 52276	3K9 5% 0,5W
3404	4822 051 10202	2k0 2% 0,25W
3404	5322 111 90282	2K4 2% 0,25W
3405	4822 051 10131	130Ω 2% 0,25W
3405	4822 051 10151	150Ω 2% 0,25W
3406	4822 051 10123	12k0 2% 0,25W
3406	4822 051 10153	15K 2% 0,25W
3407	4822 051 20183	18k0 5% 0,1W
3407	4822 051 10223	22K 2% 0,25W
3408	4822 116 52259	2k4 5% 0,5W
3409	4822 051 10008	0Ω 5% 0,25W
3410	4822 100 11658	330Ω LIN 0,1W
3411	4822 116 81801	3Q6 5% 0,5W
3411	4822 116 82721	4Q3 5% 0,5W
3412	4822 116 81801	3Q6 5% 0,5W
3412	4822 116 82721	4Q3 5% 0,5W
3413	4822 051 10273	27k0 2% 0,25W
3414	4822 051 10008	0Ω 5% 0,25W
3415	4822 116 52253	2k 5% 0,5W
3416	4822 116 52253	2k 5% 0,5W
3417	4822 051 10008	0Ω 5% 0,25W
3418	4822 051 10008	0Ω 5% 0,25W
3440	4822 116 52199	68Ω 5% 0,5W
3442	4822 051 10562	5k60 2% 0,25W
3443	4822 113 80454	4Q7 10% 5W
3444	4822 053 11562	5k60 5% 2W
3445	4822 051 10689	68Ω 2% 0,25W
3447	4822 052 11181	180Ω 5% 0,5W
3448	4822 052 10108	1Ω 5% 0,33W
3449	4822 052 10108	1Ω 5% 0,33W
3451	4822 051 10333	33k0 2% 0,25W
3452	4822 111 30508	10Ω 5% 0,33W
3453	4822 052 11181	180Ω 5% 0,5W
3454	4822 052 11102	1K0 5% 0,5W
3455	4822 051 20183	18k0 5% 0,1W
3456	4822 053 20434	430k0 5% 0,25W
3460	4822 051 10113	11k0 2% 0,25W
3465	4822 051 20185	1M80 5% 0,1W
3470	4822 052 10478	4Ω70 5% 0,33W
3501	4822 116 40137	PTC/PTC
3504	4822 053 21106	10M0 5% 0,5W
3509	4822 116 52287	51k 5% 0,5W
3510	4822 116 52287	51k 5% 0,5W
3511	4822 051 10102	1k0 2% 0,25W
3513	4822 051 10104	100k0 2% 0,25W
3514	4822 116 52278	390k 5% 0,5W
3515	4822 051 10471	470Ω 2% 0,25W
3516	4822 051 10101	100Ω 2% 0,25W
3517	4822 116 52206	120Ω 5% 0,5W
3518	4822 051 10224	220k0 2% 0,25W
3520	4822 051 10183	18k0 2% 0,25W
3521	4822 053 11209	20Ω 5% 2W
3522	4822 053 11209	20Ω 5% 2W
3523	4822 051 10229	22Ω 2% 0,25W
3525	4822 053 11339	33Ω 5% 2W
3526	4822 116 52206	120Ω 5% 0,5W
3530	4822 053 11569	56Ω 5% 2W
3533	4822 050 14873	48K70 1% 0,4W
3534	4822 051 10332	3k30 2% 0,25W
3535	4822 100 20168	1k 10% LIN 0,05W
3544	4822 052 10108	1Ω 5% 0,33W
3547	4822 050 11002	1k0 1% 0,4W
3549	4822 051 10479	47Ω 2% 0,25W
3550	4822 051 10911	910Ω 2% 0,25W
3551	4822 051 10151	150Ω 2% 0,25W
3552	4822 051 10101	100Ω 2% 0,25W
3553	4822 051 10681	680Ω 2% 0,25W
3554	4822 053 11689	68Ω 5% 2W
3555	4822 051 10101	100Ω 2% 0,25W
3556	4822 051 10681	680Ω 2% 0,25W
3557	4822 053 11271	270Ω 5% 2W

								
3558	4822 051 10101	100Ω 2% 0,25W	3685	4822 051 10332	3k30 2% 0,25W	5540	4822 156 20966	47 μH
3560	4822 051 10101	100Ω 2% 0,25W	3686	4822 051 10102	1k0 2% 0,25W	5541	4822 156 20966	47 μH
3561	4822 116 52219	330Ω 5% 0,5W	3687	4822 051 10102	1k0 2% 0,25W	5545	4822 157 51195	1 μH
3562	4822 051 10271	270Ω 2% 0,25W	3688	4822 050 12403	24k0 1% 0,4W	5554	4822 157 51157	3,3μH
3563	4822 051 10101	100Ω 2% 0,25W	3689	4822 051 10104	100k0 2% 0,25W	5560	4822 157 51462	10μH
3565	4822 051 10103	10k0 2% 0,25W	3692	4822 116 52204	1k 5% 0,5W	5601	4822 157 51462	10μH
3566	4822 051 20183	18k0 5% 0,1W	3693	4822 116 52284	47k 5% 0,5W	5652	4822 157 51462	10μH
3567	4822 051 20183	18k0 5% 0,1W	3695	4822 051 10101	100Ω 2% 0,25W	5653	4822 157 51462	10μH
3568	4822 053 11681	680Ω 5% 2W	3696	4822 051 10101	100Ω 2% 0,25W	5677	4822 157 53906	47μH
3569	4822 116 52215	220Ω 5% 0,5W	3697	4822 051 10101	100Ω 2% 0,25W			
3570	4822 116 52257	22k 5% 0,5W	3698	4822 116 52175	100Ω 5% 0,5W			
3571	4822 051 10471	470Ω 2% 0,25W	3699	4822 051 10472	4k70 2% 0,25W			
3572	4822 116 52202	82Ω 5% 0,5W	3850	4822 051 10103	10k0 2% 0,25W			
3573	4822 116 52284	47k 5% 0,5W	3851	4822 116 80747	75Ω 5% 0,125W			
3574	4822 051 10104	100k0 2% 0,25W	3852	4822 051 10103	10k0 2% 0,25W			
3591	4822 051 10008	0Ω 5% 0,25W	3853	4822 116 80747	75Ω 5% 0,125W			
3593	4822 051 10008	0Ω 5% 0,25W	3854	4822 051 10008	0Ω 5% 0,25W			
3601	4822 051 10103	10k0 2% 0,25W	3855	4822 116 80747	75Ω 5% 0,125W			
3602	4822 051 10822	8k20 2% 0,25W	3856	4822 051 10008	0Ω 5% 0,25W			
3603	4822 050 12403	24k0 1% 0,4W	3857	4822 051 10008	0Ω 5% 0,25W			
3604	4822 051 10151	150Ω 2% 0,25W	3858	4822 116 80747	75Ω 5% 0,125W	6014	4822 130 80888	BA682
3605	4822 050 12204	220k0 1% 0,4W	3859	4822 051 10008	0Ω 5% 0,25W	6019	4822 130 80446	LL4148
3606	4822 116 52233	10k 5% 0,5W	3860	4822 051 10471	470Ω 2% 0,25W	6020	4822 130 80446	LL4148
3607	4822 051 10332	3k30 2% 0,25W	3862	4822 116 52256	2k2 5% 0,5W	6034	4822 130 80446	LL4148
3610	4822 051 10153	15k0 2% 0,25W	3865	4822 116 82719	56Ω 5% 0,125W	6042	4822 130 80888	BA682
3611	4822 051 10103	10k0 2% 0,25W	3866	4822 116 82718	18Ω 5% 0,125W	6050	4822 130 30621	1N4148
3612	4822 051 10103	10k0 2% 0,25W	3871	4822 116 52215	220Ω 5% 0,5W	6051	4822 130 30621	1N4148
3613	4822 051 10434	430k0 2% 0,25W	3875	4822 116 52196	51Ω 5% 0,5W	6052	4822 130 30621	1N4148
3614	4822 051 10472	4k70 2% 0,25W	3876	4822 051 10332	3k30 2% 0,25W	6053	4822 130 80446	LL4148
3615	4822 051 10824	820k0 2% 0,25W	3879	4822 051 10103	10k0 2% 0,25W	6115	4822 130 80888	BA682
3616	4822 116 52284	47k 5% 0,5W	3901	4822 051 10008	0Ω 5% 0,25W	6116	4822 130 80888	BA682
3618	4822 051 20183	18k0 5% 0,1W	3902	4822 051 10008	0Ω 5% 0,25W	6119	4822 130 80888	BA682
3620	4822 051 10433	43k0 2% 0,25W				6120	4822 130 80888	BA682
3621	4822 051 10393	39k0 2% 0,25W				6135	4822 130 80883	LLZ-C4V7
3622	4822 116 52234	100k 5% 0,5W				6170	4822 130 80888	BA682
3623	4822 116 52247	16k 5% 0,5W	5010	4822 157 62552	2μH2	6172	4822 130 80888	BA682
3624	4822 051 10393	39k0 2% 0,25W	5028	4822 157 63068	0.28μH	6289	4822 130 80446	BAS32L
3625	4822 051 10163	16k0 2% 0,25W	5030	4822 157 60123	6μH8	6306	4822 130 80954	LLZ-C5V6
3626	4822 116 52251	18k 5% 0,5W	5032	4822 157 62767	8μH	6365	4822 130 80446	LL4148
3627	4822 051 20183	18k0 5% 0,1W	5040	4822 157 63064	0.19μH	6370	4822 130 82304	LLZ-F12
3628	4822 051 10393	39k0 2% 0,25W	5040	4822 157 63071	0.30μH	6415	4822 130 80446	LL4148
3630	4822 051 10274	270k0 2% 0,25W	5043	4822 157 63069	0.70μH	6416	4822 130 42488	BYD33D
3631	4822 116 52275	360k 5% 0,5W	5138	4822 157 53635	10k 0,75μH 6%	6443	5322 130 31938	BYV27-200
3651	4822 051 10103	10k0 2% 0,25W	5139	4822 157 53635	10k 0,75μH 6%	6446	4822 130 32896	BYD33M
3652	4822 116 52207	1k2 5% 0,5W	5177	4822 157 52333	COIL 100μH	6449	4822 130 42488	BYD33D
3653	4822 116 52207	1k2 5% 0,5W	5250	4822 157 50961	22μH	6451	4822 130 42488	BYD33D
3654	4822 051 10102	1k0 2% 0,25W	5251	4822 320 40235	DELAY LINE	6452	4822 130 42488	BYD33D
3655	4822 051 10562	5k60 2% 0,25W	5258	4822 157 51462	10μH	6470	4822 130 42488	BYD33D
3656	4822 051 10112	1k10 2% 0,25W	5259	4822 157 52808	10μH	6502	4822 130 81497	1N4005GP
3657	4822 051 10683	68k0 2% 0,25W	5284	4822 157 60141	3μH3	6503	4822 130 81497	1N4005GP
3658	4822 051 10272	2k70 2% 0,25W	5285	4822 157 60141	3μH3	6504	4822 130 81497	1N4005GP
3659	4822 051 10112	1k10 2% 0,25W	5286	4822 157 60141	3μH3	6505	4822 130 81497	1N4005GP
3660	4822 116 52226	560Ω 5% 0,5W	5296	4822 157 51462	10μH	6511	4822 130 80446	LL4148
3661	4822 116 52204	1k 5% 0,5W	5320	4822 157 52808	10μH	6513	4822 130 80446	LL4148
3662	4822 051 10008	0Ω 5% 0,25W	5440	4822 157 52983	2N2	6514	4822 130 80446	LL4148
3663	4822 051 10151	150Ω 2% 0,25W	5441	4822 146 21116	LOT DRIVER	6515	4822 130 80446	LL4148
3664	4822 116 52296	6k8 5% 0,5W	5443	4822 157 51462	10μH	6516	4822 130 80886	LLZ-F22
3665	4822 116 52204	1k 5% 0,5W	5445	4822 140 10406	L.O.T.	6521	4822 130 42488	BYD33D
3666	4822 051 10151	150Ω 2% 0,25W	5447	4822 157 62766	262LYF-0095k	6522	4822 130 30621	1N4148
3667	4822 116 52233	10k 5% 0,5W	5449	4822 156 20966	47 μH	6523	4822 130 80446	LL4148
3668	4822 051 10433	43k0 2% 0,25W	5452	4822 157 51157	3,3μH	6530	4822 130 82033	BYD34J
3669	4822 051 10153	15k0 2% 0,25W	5453	4822 157 51462	10μH	6537	4822 130 34167	BZX79-F6V2
3670	4822 116 52233	10k 5% 0,5W	5454	4822 156 21332	LIN. COIL	6540	4822 130 42488	BYD33D
3671	4822 051 10103	10k0 2% 0,25W	5470	4822 157 51462	10μH	6545	4822 130 42488	BYD33D
3672	4822 051 10102	1k0 2% 0,25W	5500	4822 212 22978	MAINS FILTER	6549	4822 130 80446	LL4148
3673	4822 051 10103	10k0 2% 0,25W	5503	4822 157 51235	4μH 7 10%	6554	4822 130 42489	BYD33G
3674	4822 116 52204	1k 5% 0,5W	5515	4822 157 50963	2μH2	6555	4822 130 82305	LLZ-F18
3676	4822 116 52233	10k 5% 0,5W	5519	4822 157 51235	4μH 7 10%	6557	4822 130 80887	LLZ-F36
3678	4822 051 10008	0Ω 5% 0,25W	5521	4822 157 51195	1 μH	6558	4822 130 80887	LLZ-F36
3679	4822 051 20222	2k20 5% 0,1W	5524	4822 157 53542	1μH 2%	6559	4822 130 80887	LLZ-F36
3680	4822 051 10008	0Ω 5% 0,25W	5525	4822 148 81121	SOPS TRF	6562	4822 130 80905	LLZ-F5V1
3682	4822 051 10008	0Ω 5% 0,25W	5531	4822 158 10551	27μH	6565	4822 130 81252	LLZ-F4V7
3683	4822 051 10008	0Ω 5% 0,25W	5532	4822 157 51157	3,3μH	6568	4822 130 81147	LLZ-F6V2
3684	4822 051 10332	3k30 2% 0,25W	5534	4822 157 62878	1μH	6569	4822 130 80446	LL4148
						6570	4822 130 20245	SFOR5D43
						6573	4822 130 80446	LL4148
						6602	4822 130 82037	HZT33
						6603	4822 130 80446	LL4148
						6604	4822 130 80446	LL4148
						6605	4822 130 80446	LL4148
						6606	4822 130 80446	LL4148

## CRT-panel



6658	4822 130 80446	LL4148
6663	4822 130 33951	CQS51L-3
6679	4822 130 80446	LL4148
6849	4822 130 30621	1N4148
6850	4822 130 80446	LL4148
6851	4822 130 80446	LL4148
6852	4822 130 80446	LL4148
6853	4822 130 80446	LL4148
6854	4822 130 80446	LL4148
6855	4822 130 80446	LL4148
6865	4822 130 30621	1N4148
6880	4822 130 81147	LLZ-F6V2



7002	4822 209 10892	LA7910
7015	4822 209 63107	TDA4504B/N1B
7027	4822 130 61207	BC848
7030	4822 130 61207	BC848
7038	4822 130 61207	BC848
7125	4822 209 63105	TDA3843/V2
7135	4822 209 63217	TDA3827/V2
7156	4822 130 61207	BC848
7157	4822 209 60956	TDA7052/N1
7158	4822 130 61207	BC848
7170	4822 130 61207	BC848
7221	4822 209 63108	TDA4660/V2
7250	4822 209 63109	TDA4650/V3
7251	4822 130 61207	BC848
7255	5322 130 42136	BC848C
7256	4822 130 61207	BC848
7260	4822 209 70019	TDA4510/V2/S8
7280	4822 209 63104	TDA3504/V1
7400	4822 209 60955	TDA3653B/N1
7440	4822 130 41782	BF422
7445	4822 130 42679	BUT11AF
7512	5322 130 42136	BC848C
7514	4822 130 82034	CNX83A
7515	4822 130 42513	BC858C
7516	5322 130 44349	BC635
7525	4822 130 42679	BUT11AF
7537	5322 130 42136	BC848C
7552	4822 130 42155	BC327A
7553	5322 130 42012	BC858A
7554	4822 130 42032	BC337A
7555	5322 130 60159	BC846
7556	4822 130 60136	BC856
7561	4822 130 40823	BD135
7563	5322 130 42012	BC858
7571	4822 130 61207	BC848
7600	4822 310 31846	TMP47C434N3121
7605	4822 209 73852	PMBT2369
7654	4822 130 61207	BC848
7658	4822 130 61207	BC848
7665	4822 130 61207	BC848
7670	4822 130 61207	BC848
7672	4822 130 61207	BC848
7674	4822 130 61207	BC848
7685	4822 209 62098	ST24C02CP
7686	4822 130 61207	BC848
7875	4822 130 61207	BC848
7876	4822 130 61207	BC848



4822 255 70251	CRT SOCKET
4822 265 30735	5 PINS
4822 265 30734	6 PINS



2204	5322 122 31842	330pF 5% 63V
2206	4822 124 41828	1µF 20% 250V
2217	5322 122 31842	330pF 5% 63V
2230	5322 122 31842	330pF 5% 63V
2237	4822 121 41926	33nF 5% 630V



3202	4822 053 11123	12kΩ 5% 2W
3203	4822 111 50518	1k5 5% 0,5W
3204	4822 051 10229	22Ω 2% 0,25W
3205	4822 051 10621	620Ω 2% 0,25W
3206	4822 051 10112	1k10 2% 0,25W
3207	4822 100 11638	4k7 20% 0,1W
3210	4822 051 10332	3k30 2% 0,25W
3211	4822 051 10332	3k30 2% 0,25W
3212	4822 051 10332	3k30 2% 0,25W
3213	4822 100 11637	2k2 20% 0,1W
3214	4822 100 11637	2k2 20% 0,1W
3215	4822 053 11123	12kΩ 5% 2W
3216	4822 111 50518	1k5 5% 0,5W
3217	4822 051 10229	22Ω 2% 0,25W
3218	4822 051 10621	620Ω 2% 0,25W
3219	4822 051 10112	1k10 2% 0,25W
3220	4822 100 11638	4k7 20% 0,1W
3222	4822 051 10561	560Ω 2% 0,25W
3224	4822 051 10152	1k50 2% 0,25W
3225	4822 051 10432	4k30 2% 0,25W
3226	4822 051 10112	1k10 2% 0,25W
3227	4822 051 10102	1k0 2% 0,25W
3228	4822 053 11123	12kΩ 5% 2W
3229	4822 111 50518	1k5 5% 0,5W
3230	4822 051 10229	22Ω 2% 0,25W
3232	4822 051 10621	620Ω 2% 0,25W
3233	4822 051 10112	1k10 2% 0,25W
3234	4822 100 11638	4k7 20% 0,1W
3235	4822 052 10108	1Ω 5% 0,33W
3236	4822 111 50518	1k5 5% 0,5W
3237	4822 111 50518	1k5 5% 0,5W



5235	4822 157 50965	15µH
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6205	4822 130 80446	BAS32L
6218	4822 130 80446	BAS32L
6227	4822 130 80446	BAS32L



7205	4822 130 41782	BF422
7218	4822 130 41782	BF422
7225	5322 130 42012	BC858A
7227	4822 130 41782	BF422